eco to the power of two

inducing a new economic entity

Welcome to this open-source document on ecological economics. This document describes a new economic entity, an unbounded non-group, the moneyflow around it, and the internal network of relationships that encourage subjective evaluation, as well as how members of this non-group interact financially with standard social objects such as corporations, government bodies, educational centers and so on. In terms of culture change over the next decade, this entity effects a transformation of money-making into value-creation in a financially viable way.

There are four main elements (and two optional ones) to this new economic entity:

- ***self-selecting filter*** to the non-bounded, or non-group
- regular ***non-directed group*** meeting
- established ***action cycles***
- ***scalable invitation***
- (tracking ***subjective enumeration***, as part of the confluence model platform)
- (***macropatronage*** to inject money into influential individuals)

The fourth, ***scalable invitation***, is the main operator of eco^2 since it combines the functions of funding, buying-selling, and investment all in one scalable, self-similar “transaction”. We are working on a maths equation for this moneyflow. By modelling it theoretically, we can estimate the ideal funding to initiate the system, that is “birth” the eco^2 entity. Once functional, it can be coded in order to track the moneyflow through operational practice on an hour to hour, day to day, week to week, month to month, decade to decade and even century to century period!

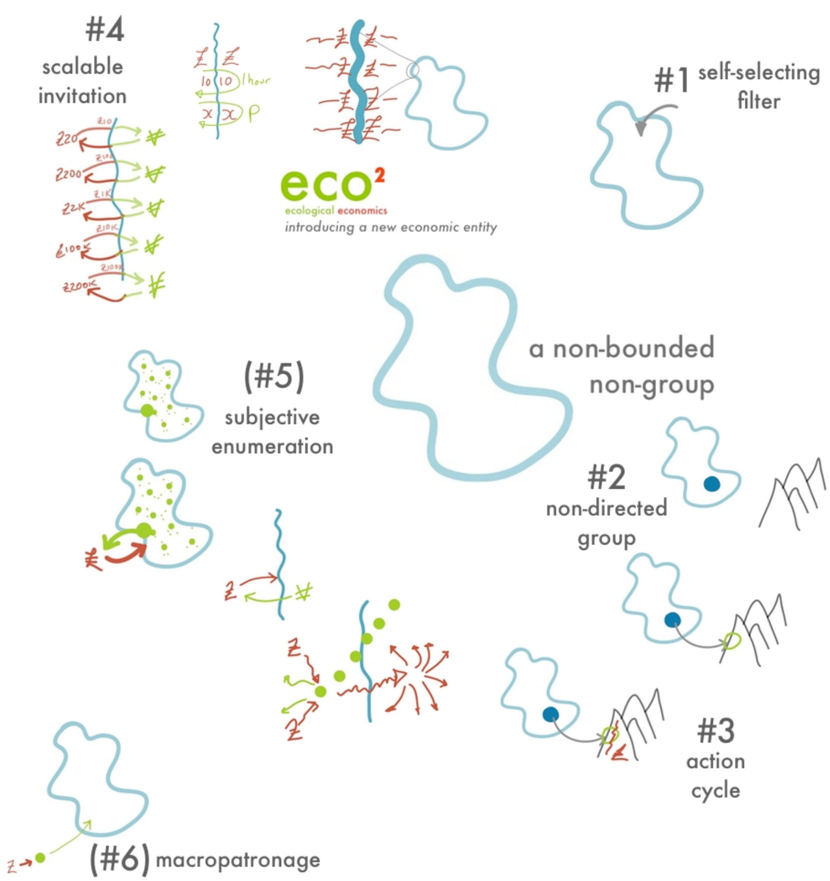
Because the subject matter has multiple-aspect within deep subjective experience -- we are offering an alternative way to deal with money after all -- this document consists of different people’s contributions. Rather than producing a mashup, each persons section is their own, offering written descriptions and graphics to explain the concepts, processes and mechanics of the new entity. The one consistent format we are aiming for is a mathematical description of the movement of money. As an open-process document accessible by anyone on the net, ***feel free to leave comments***. Who knows, we may find your contribution may be a unique, essential piece to the puzzle that is this new economic entity?

contents of eco^2

david's intuition

Why might eco^2 interest you? Or even, why is this the most important document you may read this year?

If the concepts are sound and the math works, the ***eco^2*** entity described in this document will grow at an exponential rate as its boundary expands in the financial arena while creating a safe haven for non-financial, collaborative engagement, or indeed "the commons". The main mechanism "doubles your money", a promise that once validated will prove irresistible, while the actual principle underlying the practice is to "give money away". It really *is* too good to be true. The entity may reach a stable ideal scale within a couple of seasons (hovering around Dunbar's Number), though if participants do not import more static organisational methodologies, it may grow at such an explosive rate that it will reach a turning point within the decade, at which point money is forgone altogether. This entity eats money for the betterment of humanity, replacing the practice of money-making with value-creation.



rough description of the eco^2 entity

- ***self-selecting filter*** has several functional properties:
  - along the lines of Pam's Landscape of Change, so people have an idea of where they are, and also how ready to participate with activities at hubminster
  - also incorporating potential networking engagement between people of a specific "cohort" or "bubble" of people who happen to attend together... conduct an action cycle for those who are ready for it...
  - together with entry of data into some kind of platform, either outsourced to skillpages or linkedin, or as part of a bespoke hubminster platform running along confluence model lines
  - personal recommendation by the person who runs the process, eg Pam
  - include some myth-busting thought-experiments wrt money, eg the direction of money, buying for a thing, saving, etc...
  - conduct the confluence dive: [the wiki link seems to be down]
- regular ***non-directed group*** meeting:
  - along the lines of lloyd's tuttle
  - about networking, warm and deep relations
  - and opening for invitation to action cycles that week at different locations
  - this link looks a little old: http://tuttleclub.wordpress.com/ lloyd is the man to talk to
- established ***action cycles***:
  - through warm relationships, members of the hub set up action cycles in various silos, organisations, companies, bodies, invite horizontal players within the hub, and then open it up for three self-selecting individuals from the non-directed group meetings and otherwise
  - some info can be found in this google doc
- ***scalable invitation***, which allows members to invite others to participate with a simple relationship of guaranteeing double the money that they bring to the hubminster
  - anyone invited is paid for their trouble, roughly on the basis of £10/hour, £100/day, £1k/week, £10k/season, £100k/year...
  - think about this in terms of employment, where you are being paid for your time... similarly, if you do not produce enough value, you will not be invited to return
  - anyone invited is asked to bring that amount of money with them, and will return home with double... so if you are invited for an hour, you bring £10 at the start, and you leave with £20 at the end...
  - this doubling of money can be considered to be investment, since the return value if guaranteed, over the period of time...
  - the money that people bring to start with is used, to cover costs during that time, while generating value that will generate further funds in order to make the system sustainable...
  - the system grows by people being invited and attracted, the money flow increases at all levels as people choose to come (without being invited), and new

members are invited in at higher orders of money/time, which is related to the conversation of social capital and co-created value to money

- (optional: confluence model and tracking ***subjective enumerations***)
    - the minimal system that tags "credits", the internal weighing system of subjective evaluation...
    - there is no money flow between individuals within the system
    - extra money inflow generated by the conversation of social capital to money is distributed exactly equally, fractioned by time (how long has someone been invited in), and distributed in the ratio of subjectively enumerated evaluation ("credits")
- (optional: ***macropatronage*** to inject money into influential individuals)
    - a financial relationship between and company, an individual and the media that makes use of secondary advertising
    - for the right of having their name/logo tagged to an individual, the social artist, where-ever the social artist's name appears in any medium, the company pays a lump sponsorship value
    - this allows companies to reach their customers through tertiary social media such as through blogs ands tweets and so on, as well as through formal secondary media such as newspaper and magazine articles, and primary media such as posters and book covers of any publicity the individual produces for themselves
    - http://prezi.com/0cpt4imqcdw8/macropatronage/
    - an initial startup of these types of relationships is in the region of 10 people at £100k each, in order to attract secondary advertising from the initial and original reportage

rough description of the eco^2 proposal process

There are three stages and phases to the process, from initial concept formation to sustainable growth.

- stage 1 -- embryonic
    - inspiring the initial elements - history of documentation in the form of blogs and emails and personal testimonies - ***concurrent***
    - gathering together the ideas to form a system - inviting players to "rub minds", namely Pam McLean, Lloyd Davis, Tav, Nick, Sal, Bonnie, Paul Messer, Liam Barrington Bush
    - working on the maths side, namely Edward, Juke, Steve
    - writing a proposal, of which this is a part - david, lloyd, pam
    - putting out invitation to mathematicians in various networks... david
    - reformulating time scale with wise^0, proposal^1, eco^2, math^3 documents - david
    - proposal for funding for math^3 challenge, to get "birthing" numbers right - david

    - getting final reviews and contributions from the next edge, openbadge participants... david
    - presenting proposal formally to Indie Johar of 00 architects and their partners - nick, david
    - securing initial funding: honourary, minimal, optimum guarantors -- the pre-birth stage

- stage 2 -- pre-birth
    - one month to generate three to five lots of £10k
    - approaching google, dyson, virgin, as well as wealthy individuals and so on
    - giving them this entity free, with potential involvement in the future once process proven

- stage 3 -- birth and critical development of internal processes
    - inviting players to the system, guaranteeing return of investment, for £30k over a season, paying three players £10k for a season
    - passing some benchmark ***collective tests***: writing a book, inviting a world-known speaker, producing a computer based platform, and I am willing to offer any number of sellable ideas which are actionable from day one; these are productions in value, some of which may result in further moneyflow, which we call profit or "surplus", attracting the first £1m-decade guarantor
    - failing to meet £30k moneyflow in third month, consequences: wrap it up, or continue
    - reaching £30k moneyflow, consequences: wrap it up, or continue
    - minimal iteration: iterating £30k moneyflow cycles per month, returning only the initial investment
    - generating £30k moneyflow, returning the initial investment and guarantee, "break-even", second order sustainable growth ie "doubling your money"

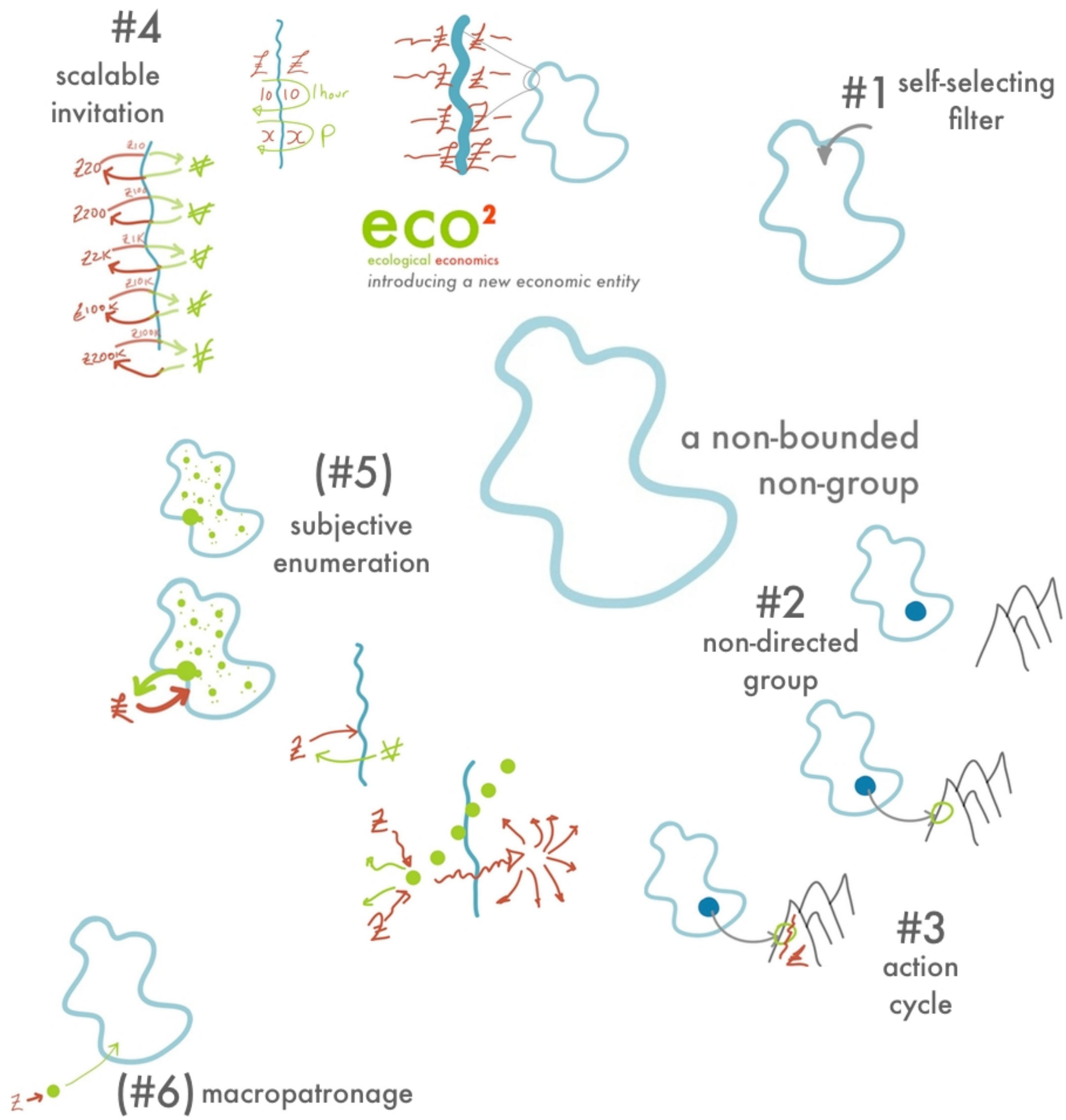
- stage 4 -- sustainability through steady growth
    - by fulfilling the guarantee, the system is doubling its return
    - surplus from the conversion of value to money is split up by mindmass and divided by time engaged (and potentially redistributed in the ratio of individual ***subjective enumeration***)
    - additional "income" from players who are not invited, but are paying for the experience ("guests"), inviting new players who are willing to let their contribution be used ("gifters"), or new players who are willing to fund the eco^2 entity artificially without any invitation and thus guarantee of return ("guarantors")
    - (optional income from ***macropatronage***)
    - the system is growing, ideally exponentially, at the lowest levels of new players being invited, and more players being invited as moneyflow is increased, and further guarantors at higher levels of engagement
    - metaphor is rapid growth, from a shoot through sapling to a full blown tree, or a

runner from the blocks through precipitous angle to upright running

    ○

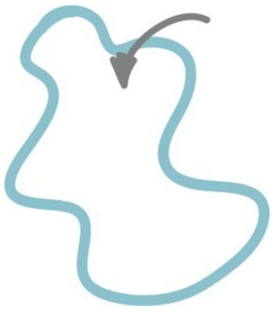
- stage 5 -- global sustainability
    - a threshold occurs where the system reaches a point where the mindmass-hours engaging internally with subjective evaluation, is greater than the mindmass-hours of traditional company or government structures
    - this threshold indicates entry into the period where our economic engagement is based primarily on collaboration, and where competition has its place within the system
    - beyond this threshold, in a world of collaboration, the economics of equality which are running within the system will stabilise various disorders.

explaining the finer details of the eco^2 entity



We are dealing with a system, and a scalable one at that, based on gift-giving, while interfacing with the current money and capital system. Things get tricky. Breaking things into parts satisfies the mind's capacity to comprehend, but such explanations necessarily break the system which it describes. Nevertheless, the following explanations, drawings and videos explain various elements, and interpretations, of ecological economics. As usual, according to the methodological shift, the best way is to try it and see how it works. And that means putting my money (what little I have) where my mouth is -- I shall be inviting people to participate with the essential elements (without waiting for the optional electronic platform to track ***subjective enumeration*** or the optional funding stream from ***macropatronage***).

1) self-selecting filter



The initial boundary of engagement is very important indeed. If someone is personally invited to attend, it is advised that they go through the following procedure. The objective is that they leave with a greater understanding of where they are in terms of business practice, build some network relationships, clarify what they offer and their aims, and perhaps have actually demonstrated their skills. For the entity, which consists of the other people who are currently there, it is about accessing the resources of that new individual as quickly as possible, their skills, awareness, assets, get them connected and useful, producing value.

It is essential to realise that the filter is a direct confrontation of internal value and external institutional thinking and practice. Money might be the primary motivation that attracts people to the economic entity, with the guarantee of “double your money” when invited. This motivation interfaces directly with the internal culture of the co-creation of value. It is not an understatement to restate: *this engagement is very important indeed*. Even for those who are approaching the entity without interest in money, they may find the boundary offensive, and such an attitude could prejudice their awareness and contribution, blinding them to the opportunity to manifest social value.

Depending on the context, the filter contains the following elements. Ideally, there will be a regular cycle of up to ten people. These are conducted by “experts”, people who have self-selected to lead the processes, invited to do so by other members of the entity. The role of the person conducting the filter is very important, because they have the ability to spot “talent” and provide personal recommendations to other members directly. I need to know if particular people turn up, those with a fine sensitivity of mind, and are willing to play, capable of improvising given challenging circumstances.

The filtering process is self-selecting. There is no judgement made by anyone, and it is not compulsory. It is about self-determination. But this is less to do with willfulness and individual efforts which give rise to ego and competition, and more to do with open-mindedness and collective effort which give rise to community and collaboration.

Although the diagram shows an arrow entering the entity, if the filtering works, the entity will grow into the social world of the individual. It is less about people joining, learning what the rules are etc within the “group”. If conducted well, people will feel listened to and valuable, and thus the entity will have grown into the social space of the individual. The community will have grown. And even the notion of “invitation” may be reversed, and it is the new person who is inviting everyone within the entity into their lives, to help them out with work issues and their local community.

1.1 Pam’s Landscape of Change

There is a wide range of awareness and skills in the current “job market”. Pam has come up with a simple means by which people can find out what kind of thinker they are, and she has put it in terms of 20th/21st thinking. It is not that one is better than the other, or that there is a strict divide, but that there is a continuum across all kinds of areas, skills, beliefs. By locating themselves on the continuum, this makes it easier for us to engage.

For example, David Pinto is extremely 21st, and he has difficulty working with people who are even quite strongly 21st century. For example, he works with open source principles and gives away his ideas freely, and learns experientially, by trying first and then talking about it.

[Pam’s material is presented in her section below]

1.2 Subjective Tests

For those who wish to conduct them, there are a few subjective tests. There are no right or wrong answers, merely a contemplation of awareness. How well do people deal with exercises that question the basis of their reality? These take the form of thought experiments.

Most have to do with money. Here are the ten delusions from Dunno. They share a reasonable amount with Pam’s activity, and could provide a starting point for group discussion.

- money can be saved for the future
- we pay for things
- historic figures of note were special
- news is new
- power flows downwards through a hierarchy
- let’s make some money
- fixing environmental problems is our first priority
- people act self-servingly in a free market
- too many people, not enough jobs
- our institutions are stable

There are alternative approach with the Confluence Dive.

1.3 action cycle

Or something like it. With some self-sorting, a small group of like-minded people (in terms of 20th/21st) attempt to align and reach consensus and commitment on an idealistic objective to be achieved the following week. The objective to create conditions that might gell the group, give newbies a reason to engage one another after they leave.

Normally, an Action Cycle takes an hour, and indeed, this may constitute a different hour, where individuals are invited to come back. Depends on whether I or anyone else, is interested in playing these games with new comers.

1.4 Data Entry

This might be in the form of Skillpages, or may be a bespoke platform developed by Tav's Espians. Essentially, information of the skills of the individual, what they are offering and so on, are stuck down on some system. This allows other members to cross-reference and find them, in order to invite them in to take part in some project or other.

Because the nature of the operating system is scalable, there is a reasonably high chance that new members will be invited in to test their skills, kind of like "on the job interview". This electronic medium is a temporary and artificial mechanism, which is supplanted by in-person engagement and experience. For most young graduates, it becomes difficult to get their foot in the door. It is essential that newbies are invited in straight away.

The minimal system simply records a unique identification number and tracks subjective enumeration. An optimal system performs the function of the confluence model.

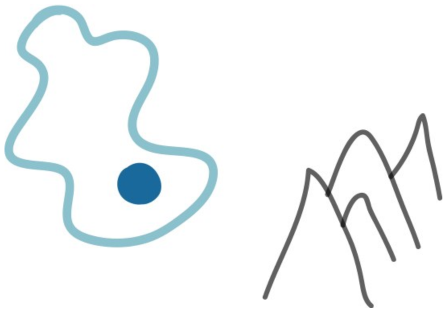
1.5 Explanations

Participants must be careful they do not spend their time talking within the entity. Pertinent information exchange can very easily degrade into the exchange of opinion, something which must be kept outwith the entity, shared during "downtime" if at all. With regards to information, because the working practice is to be transparent, information can be found on the net in various forms.

The emphasis is on action. So, knowledge and skills are not abstract categories but are to be found in people. Within the entity, the practice is trial and testing, experiment and exploration. Whereas the outer world is a system replete with proxies, of position and justification, within the entity it is based on actionable skills, on getting the job done. A person entering the entity, crosses a boundary from ratified, positional accountability to a trust network of actionable skills.

However, some people may want more than this document, booklets, or videos, and require in-person engagement when coming to terms with various elements of the eco^2 entity. This is especially valid for those who are attracted to the entity and have gifted funds for the overal health of the entity and its constituent members. So, they are effectively paying for an in-person explanation of how things work. Quite reasonable. Very human.

2) regular non-directed gatherings

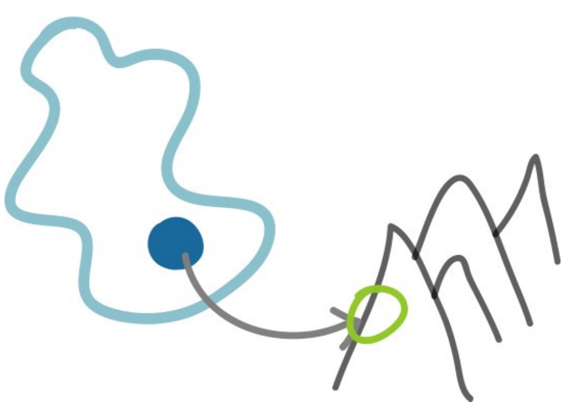


If the whole entity is a collaborative network, then the regular non-directed gathering is a concentration of the whole network. This is not the nucleus of the cell, but perhaps something like the vacuole. It is a greater intensity of social capital, and the interest generated is at a deeper human level. Although a lot of “work” is done in the entity, the work that is conducted in this gathering is no less important because it works at a deeper level. Warm relationships are fostered, connections are reinforced, people get to know one another beyond strict “work” boundaries. It is about being comfortable, knowing, community.

These have been capably facilitated by Lloyd with his Tuttle club meetings. There is no direction for the group. It has no function in terms of movement of the whole body. It is not like a company (depicted here by hierarchical mountains), or the executive at the top of these hierarchies who are responsible for making a company move in set directions, or even to “evolve”.

New members can find themselves here on the first time they visit. Indeed, they may be invited to participate in them, or they can self-select to come to one. Because of it’s nature, on any given gathering, there may be a wide range of players, from long-term players who are on an annual cycle, to graduates who have just turned up on that day. What matters is that it is regular.

3) establishing action cycles

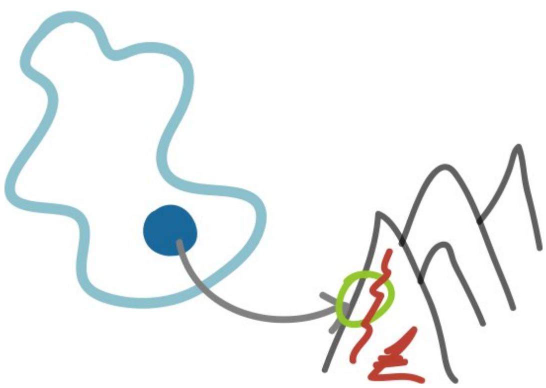


Invitations to Action Cycles are conducted in person at the non-directed gatherings, and generally through the electronic medium which connects players (news letters, or twitter, or bespoke platform). These are conducted on a weekly basis.

So there will always be an opening to join an action cycle.

An Action Cycle is an intense piece of open, social architecture. It is not managed, nor even facilitated. Its objective is to assist a unique gathering of individuals to achieve an idealistic objective by reaching consensus and commitment within an initial one hour engagement.

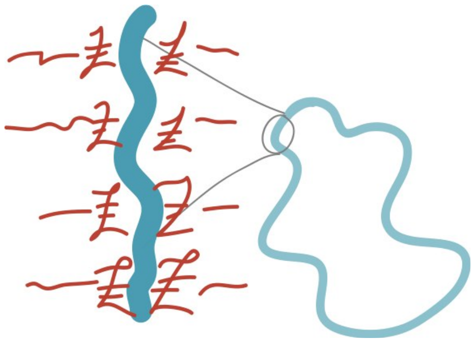
This is one of the primary mechanisms by which players can engagement organisations. If conducted well, idealistic objects are achieved, beyond the capacity of any hierarchical and legal structure. And there are many problems we are facing, personally and socially as well as environmentally and globally, that are beyond the reach of political organisations, whether this is the most powerful superpowers or trans-national companies, or the smallest charities who are helping the poorest and disaffected of us. In addition to achieving these objectives, the organisation will feel indebted to repay the work done to achieve objectives itself has ownership of. That is, the moneyflow within the organisation will be tapped.



The principle behind the action cycle is that they are conducted freely. The people who go to the action cycle are going out of their free will, they are not being paid. Hence, to pay for what is done, is incorrect. It was given freely. In this way, the solutions that open up are light enough to be reached without the weight of thinking of money. If money is offered, it is split equally to all the participants, with preference to freelancers (or is split equally to all members of the entity if the subjective enumeration system is up and running).

Further details on the Action Cycle can be found in this google doc (consider it an appendix:). Action cycles are just one way in which the entity converts value into money, but it the purest way because it is simply solving the “silo” problem that bounded groups suffer from. It is a purely structural relationship between the interaction of non-bounded, horizontal and networked collective and bounded, vertical and hierarchical organisations.

4) scalable invitation


This constitutes the primary boundary that constitutes the entity. It is purely an interaction of money. A good way to think about it is, money left on the outside, and value on the inside. For people inside, money is plastered up along the outside, so that internally, people are free to collaborate without concern about money. For people outside, they see the money that the entity is surrounded by, and are attracted to it.

4.1 fundamental generalised contract - “double your money”

How does this work? The basic mechanism is “double your money”. When you are invited to the entity, the person who invites guarantees the invitee will return with double what they bring. So, if I am invited to visit for £10, I bring £10, leave it at the door, do whatever is required for an hour, and when I leave, the person who invited me gives me £20. This money guaranteed. It is all black. In fact, they match the initial £10 at the beginning of the hour.

Imagine a glass plate. People on the inside plaster money to the inside. People on the outside see the money and plaster money to the outside. There is a matching of inner and outer money. Once a person enters, they leave this money there, and only when they return to they pick it up if they have been invited in. Otherwise, money floats around on the inside to match up with more money from outside.

The generalised transaction is simple:

or

f(2x,p)

(where x is the base value of the invitation, p is the time period)

or

“double your money”

Money is tagged to time. Since our time, each of us being human, is the same (at least in this first proposal, since it may be varied by intensity, wrt children and so on). The amounts and periods are given below.

4.2 scale of contract

Looking more closely at the membrane of the eco^2 entity, we can see that this doubling of money is tagged to time. For the sake of simplicity, perhaps merely for this proposal but perhaps for an actual working model, there are fixed levels of engagement.

A person is invited to the entity, and they are asked to bring the amount of money for the period of time they are asked to participate. When they leave, they take double the amount they came with. Note: this scalable dimension is not the same as the simple blue-rimmed diagram of the

entity. Because of the tagging of money to time, it means that money becomes a vector in time. And because we are tagging it to human scale use, it makes money well-behaved, rather than the strange abuses that are conducted by internet trading in millionths of a second, and give rise to the huge bonuses to traders and bankers as they turn money into a game, and the resulting social repulsion.

Notice that the function of the money for time, gives rise to an internal environment that is concerned exclusively with the production of value. This may appear strange, but it is actually what a company or government or any social body does, even one as small as a family. Money is pushed to the outside, while inside, people engage, collaborate, work together, learn at universities, play in teams, hang out, and lounge around with family. This entity is more like a family than it is to a company. A company, a legal entity, has a strict structure, something like a cell wall which surrounds this membrane. And these cell walls are rather rigid, positions and roles. And these positions are tagged to money. Even though an “executive” and a “receptionist” both spend the same amount of time at the office, their pay is hardly comparable. Indeed the ratio can be as high as 500:1. Which is to say, one person’s time is 500 times as valueable as another’s. And if we include the financial gear ratios to “developing” countries, the underlying interpretation starts getting inhuman.

The membrane is not only the social contract of money, but that of time. The security of working for a year, is more relaxing than the security of working for a year of hours, not knowing if one is to be asked to return. Security is not only in terms of monetary value, but in terms of duration of contract.

At a certain level, the membrane translates money into value. The inviter is risking their money, whereas the person who is invited is risking their time. They shall only be invited back if during the time that they give, value is created. In standard “employment” terms, an individual is brought in to do something specific, sow some shoes together, draw up some designs, project manage, and when they leave, they are paid. It is about producing value. Somewhere along the line, in a traditional company, this value is converted into another monetary transaction, and we will consider this later. For this aspect of the membrane, the “double your money” invitation, the function of “employment” deals with the conversion of money into value.

The scale of contract, the money-time vector, may be considered as “quanta of money”, though I am not sure how useful the adoption of language may be, eg wrt concepts and equations from quantum physics. Sounds good though. An alternative language set might be “money-time transfer protocol”, mttp, to evoke the internet’s creation by Bernard-Lee’s hyper-text transfer protocol, http.

4.21 dang! no vertical growth only parity

Sal warned me of this. My intuition was suggesting that the membrane would grow vertically, without any added funds from the translation of value to cash (which happens at the other end,

described under #5). That is, while people are being invited, between the time they deposit £1000 at the door at the beginning of the week and the time pick up their £2000 at the door at the end of the week, other people are invited in, such as a £10,000-season player. But this only works if that individual is not invited, or if the money is gifted and no guarantee is offered. The act of guaranteeing double your money, "fixes" the money in time. In the end, if the cash that someone brings is "fluid", then there is no increase in sums at all. There is merely the transaction of cash for the time within the entity. What I describe as the "failure state", where the individual leaves with the cash they come with, is the steady state of the system as it stands.

So, Sal was right in saying the entity can not grow vertically. Dang. As it stands...

Now, there are three implications to this, and two insights which came with it.

4.22 two insights: leverage and permissary notes

First insight: the fluidity of a person's cash when they come can be used to guarantee others, whose money they bring guarantees others, and so on. This creates a fixed structure. Money is fixed at the rate at which people come. It is a little like how people leverage their money to arrange multiple mortgages, owning the properties when the mortgages end, paid for entirely by people who rent them throughout. Interesting to notice this, since we have already seen how this system can work like a straight employer contract, or a bank/investment relationship. Now this.

Second insight: money flows, but as a consequence there is no financial imbalance. It balances itself out. Is this an indicator of how a system works with "flat" money, where no-one is making money out of money. It is purely a convenient transactional medium? Another way to think about this, is that money in this entity's boundary changes from being a promissory note to a permissary note. That is, one is permitted to engage with others within the entity for a certain amount of time.

Both insights, however valuable they may be, do not compensate for the functional need that "double your money" promises. That is, you leave with more money than you came with so you can pay for food, electric bills, rent, etc. It does not matter that at some stage, such transactions may be swallowed by the entity, where food growing and houses and so on, are within the "commons" that the entity affords within. At the current stage of its existence, in the real world of January 2012, we need to have means that money flows to pay for things, to justify the time that people spend within the entity. It has to be financially viable.

4.23 mechanical implications wrt boundary function

To this end, there are three implications to guarantee a return of money, the first of which is already built in to the mechanism. First, the following ratio is equal:

> "people who are invited : people who are not invited and those

who are gifting”

There are people who have not been invited and wish to pay to enter. Consider this training, as they learn how to produce value within the entity, thus guaranteeing that they are invited. Also, there are individuals who find the entity to be so valuable they are willing to gift their entry without any wish for return. They do not need a guarantee. Such individuals may end up with a return as a result of fluid movement of money. The maths of this needs to be examined, but I don’t like the notion that the entity must rely on “philanthropists”.

A second implication is that this boundary is subsidised by the value to cash transaction which may result “on the other side” of the entity. I have tried to keep these processes separate. I wanted to keep the value to money engagement to be an entirely purely surplus affair. That is, for people to produce value for the sake of producing value itself, with no motivation to make money whatsoever. Merely to produce the best service, experience, product, possible. Given such conditions (and the condition that they won’t be invited back unless they produce value thus avoiding laziness or fatness), people will produce products, services, experiences of much greater quality than traditional social objects like corporations, banks, governments, charities. It is all positive, all opportunistic, all about answering social needs. They are freed from the worry about making money since this is covered by the guarantee when they enter the entity and the money as they leave.

Because of the equity that is occurring at the boundary, this is no longer viable, outwith the ratio mentioned above. Thus, it may be necessary for money that results from the production of value to be used to cover the fluid movements of money around the boundary. I don’t like this, but there it is. I will continue to examine how it is possible to keep the process of scalable invitation as sustainable as possible, to reduce the need for this value-to-cash subsidy. There are many reasons for this, not least of which is a collapse of the player’s thinking and adopting a motivational strategy that is more like a company. That is, to make money.

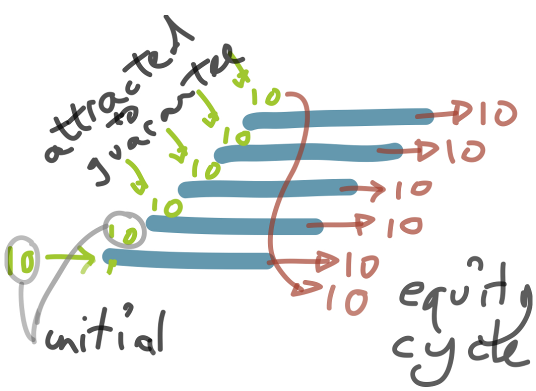
A third implication is that the social contract be altered. Two options arise in my mind. One, is that your money is not doubled, but it is increased at a rate of 50%, say. Not as attractive and obvious as “double your money”, but it may be worthwhile to examine the maths of this. The other, is to encourage the person who has been invited to add a little more by way of inviting others, say 10%. This might work, it adds 10% more fluid money to the membrane. This might indicate the rate at which the entity grows. Again, the maths of this needs to be examined.

All in all, the need for maths modelling becomes ever more essential. The mind-bending quality due to the iterative functions overlapping over time, remains, but there are now three or four branches which need to be modelled to ensure that we have an idea on how best to initiate (or birth) the entity, and what the figures we need to match for it to sustain those who participate.

4.24 equity planes, doubling cycles and cyclones - the vertical relationship

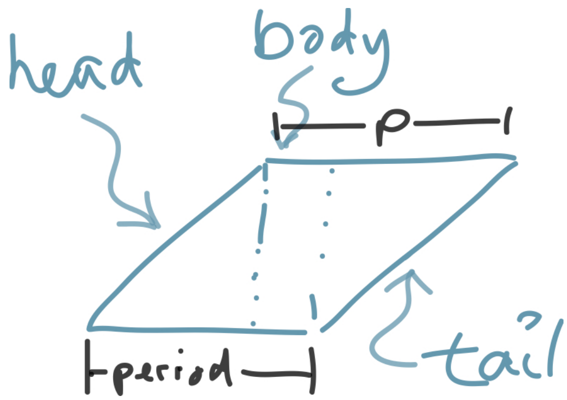
My intuition proves to have some remaining value. There is a relationship between the vertical money-time levels, but it is far from obvious. It does depend on giftors, or guarantor, or whatever one wishes to call them. Seed money or angel investment, in current enterprise speak. Interestingly, there are are two directions of vertical “growth”. From my preliminary investigation, there are two vectors, one which acts like funding or “government” and the other which is like enterprise of “companies”.

Before I explain briefly, a word on nomenclature and roles. I have had some confusion elsewhere in this document regarding the naming of people. I have found out why this is the case: it depends on what happens later. That is, a person may call themselves a teacher, but they only really become a teacher when a student makes them so. Similarly, whatever we call the financial engagement at the start which does not involve an invitation, depends on what happens subsequently. It is not the person we ought to name, nor the direct relationship to the person who invited them though this is pretty easy, it is the consequence of the system, the numbers of people who are invited and so on. Hence the difficulty in determining exactly what role a person has had. It depends on future events. Nevertheless, once the maths is sorted out, the terminology will become clear. What remains, for the duration of the formation of the system, are loose and possibly multiple-application terms. I apologise if this makes the reading difficult at this stage.



When someone seeds money, or initiates a level, they can play the equity game. This consists of a domino invitation chain, the result of which once it all plays out is equity. Even the initial initiating funds are recovered. Everybody leaves with what they entered with. This is the equity game. It can continue indefinitely, thus inducing an equity plane. As mentioned above, money effects a permissary function, enabling people to be part of the entity for periods of time. The only way this can change to a “double your money” situation is when fluid funds from above (as well as same level gifts or payments from guests). Notice the shape, this can be represented as a “unit”, a temporary conceptual element on the way to a completely fluid system. The length of each blue strip is the period, and the height is the number of people, and we can start playing around with the area of this unit as p*m (period*mindmass), with the amount of money of that period, and invitations at the rate of (p-1) as a rough estimate (such as one invitation per new day during a week period, as demonstrated in the image, though

the money should be £1k rather than the “10” as given).



This is the generalised form. At any period, there is a window of opportunity to attract a higher level player. Beyond this window, the equity cycle will plane indefinitely if people re-initiate the cycle, thus extending the “body”, or simply phase out, the “tail”. If a higher level of player is found, then the unit can double its money. The money that moves in this way, is performing a similar function to public funding. At any time during the unit that is already operating in a “doubling” way (which requires this kind of funding every period), any additional player which is attracted can thus create their own plane of equity through a domino effect at their period. There is no direct correlation between the money flow at this level, and this new domino-effect equity at the higher level. It is merely a movement of trust. It is a bit like the electromagnetic effect of a current inducing a current in a parallel wire.

In this way, an equity plane of payment induces a money flow at a higher level, not only in terms of money flow but in terms of period of life-span of the entire system. A continuous plane of equity is possible, though I would like to suggest that this should only exist for the duration of the period of the higher level. That is, a person on a weekly cycle, can only be invited for 13 cycles. This is not a rule, just a suggestion. It induces a certain shape internally within the entity, a loose “sell-by” date for people and a collective, encouraging replacement people for a project or a complete abandoning of a project, within the time frame of a higher period, in this case a season. The maths to calculate the rate of those attracted to convert an equity cycle to a doubling cycle and those which create their own equity cycle, as well as working out how many equity cycles remains elusive. This temporary conceptual scaffolding of “units” becomes unmanageable when multiple dimensions are employed simultaneously, and I look forward to a time when a mathematician manages to capture these cycles in a clean mathematical code. Managing such equations will be easier.

The reason for the term cyclone even though we are producing parallelograms, is because in another form of representation, the period is represented by cycles. By doing this, some old patterns emerge for me. The one about scale, the structural image of the twist in scale, and I think it matches closely with the effect of inducing money flow at higher and indeed lower levels of scale as we find wrt electromagnetic fields and currents. Cyclone, because I believe that there is an interaction vertically, as my intuition has suggested, and that this entity hoovers in money from the top. Convection cells also comes to mind...

4.25 end first thinking

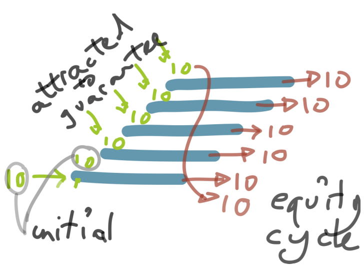
One line of thinking has arisen, and mentioned in the last section, that of thinking of the end. It goes along with the notion of a name being attributed to someone's actions retrospectively. Similarly, at the highest level, is it possible to think of the end of the whole entity? Or at least, if it scales to a global entity, and there is more money at the edges of the entity, contained within this scalable invitation membrane, than money in the outside world? Is this kind of thinking useful? It is a type of thought-experiment called backcasting, but I have never attempted this with numbers. At least, not to this extent.

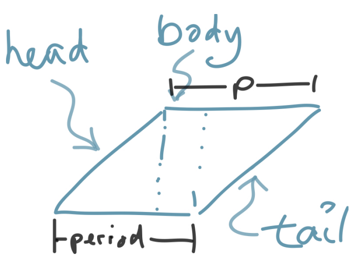
The total global trade of the world was estimated to be around $27 trillion in 2010. This does not include the ludicrous amounts of money transacted on stock exchanges, the futures markets, and all the other absurd money-on-money games. I believe this figure is as close to the ground as is practically possible to compute. The amount of money to keep the world going round with regard to the distribution of things, foodstuffs, and the like.

So, if our entity is to exist at that level, then it needs to have this amount of money at the boundary, and contain half the population of the world, or there-abouts. Can this be a useful consideration? Can we plan ahead and consider that this entity reaches this point sometime during the 21st century? This allows funders to play at the century level, knowing full well that they are funding a possible transformation of the social world. And if this is stretching things, my intuition threw up an even more unrealistic date of within the decade.

As yet, this level of thinking might be best suited for [wise^0](), though it may give us some useful figures even at the outset, with the kinds of guidelines if we are to hit certain beautiful and optimistic results.

4.26 the entity's "body" as thickness in time and free groups





And when I look at the parallelograms, we start to see the relationship between the boundary of the entity as a thing in time. It is not just the boundary of the entity, the membrane, but the human-time within it. In the simple example above, if each blue line is a person, the inside of the entity starts with one person on monday, has two on tuesday and so on, and reaches the maximum size of five people on friday. If participants re-enter, the cycle can continue indefinitely because of the parity of the cycle, the body extends. Once people leave, it reduces in size, maximally within a week, from four on

monday, for example, to one on thursday. This is the body of the entity, the time which participants have permitted.

Final note, we have found ourselves dealing with “free” groups. Most of the conventional financial contexts we have visited in our exploration have been employment or investment or shops. This is the first time that we have realised how this entity interfaces with “free” groups. That is, currently, the gathering of individuals in self-selecting, self-organised meetups and so on, to network, produce some social good, community action, etc. By considering that such groups can perform in indefinitely long equity cycles, there is a way for them to segue into the “doubling” effect. This is very powerful indeed.

With only a slight tweek, such equity cycles effect the same function of “gift circles” or “barn building” or the mechanism for the original “building societies”, where every cycle, money is gifted to one of the members. Instead of taking money out individually, it is gifted to one member of the collective. In the above diagram, this occurs to the five individual members over five cycles. Only after five cycles does this result in parity. Traditionally, this is merely a means of concentrating money, capital, without a bank. In our entity, we don’t really want to build up capital, only the rate of moneyflow. Still, if say five people were to take it in turn to invite one of their members simultaneously over five cycles, this would perform the same function, though as always, each member would need some initial cash to match the invitation.

4.27 vertical equity cycles

Amazingly, there are different forms of equity cycles, not just those that propagate horizontally. There are two directions, up and down.

The vertically-up equity cycle consists of ten players at level μ gathering together their fluid funds and guaranteeing an invitation of a player at level μ+1. Eg, 10 week-players collect their funds together, a total of £10k, and guarantee an invitation of a season-player. The season player necessarily brings their £10k. This can immediately sink back down to the 10 week-players. Thus, ten players have successfully attracted a higher level player. As it stands, no-one has made any money, no doubling has occurred. Even the μ+1 player will leave at the end of the season with the money they came with.

This vertical-up equity cycle can be extended indefinitely, where the same ten players can attract another μ+1 player, who in turn returns the fluid cash. Alternatively, the μ+1 player uses their cash to guarantee an invitation to another μ+1 player, thus inducing a horizontal equity cycle, until the funds are returned back down to the ten original μ players.

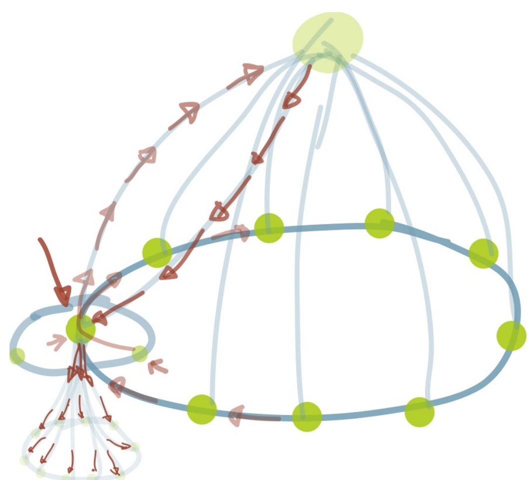
A vertical-down equity cycle is similar. A higher level player guarantees the invitation for ten lower level players. For example, a season-player can guarantee the invitation of 10 week-players, whose money they bring is returned back up to the higher level player. The higher level player can repeat this process with other lower-level players, or can allow the lower level players to

induce horizontal equity cycles at their level of scale, before it returns to the original higher level player.

Notice, it is not possible to jump more than one level. This is only possible if there are multiple players working in conjunction, two players at μ level, pouring money down into μ-1 level and μ-2 level.

Notice too, the differential in time. Moving money up attracts a bigger player with a longer period, which means that if it is kept there, the lower players will lose out. There is a tendency in the system, therefore, *for the money to move down*, to cover the "double your money" protocol of the lower levels, since the end of shorter-term periods arrive before higher level periods initiated at the same time. This is gratifying to note, and suggests that the entity is open ended above. ***It is not a pyramid scheme drawing money up from the bottom; if anything it allows money to be drawn from above***. It suggest that the entity attracts higher level players and allows breathing space for people *now* to produce value which not only benefit low level, but all level players.

The whole ecology of equity cycles looks something like a jellyfish, at least as portrayed as below:



The small ring around one of the players is based on a simple mathematical relationship as described in the next section. What is important to notice here is that there are three directions for the "fluid" money to flow: horizontally, vertically up and vertically down.

4.28 the moral question of promising a return to giftors

Consider the following moneyflow based on an initial cash injection of £30k. It should look something like a pyramid scheme.

Three players wish to kick-start a seasons play, A', A'' and A''' for £10k each, and give the money to player A. Player A keeps £10k as a guarantee, so by the end of the season, they end up with £10k for their work. £10k is given back to A', and £10k is invested. Player A also finds three

players who are willing to play, A1, A2 and A3, at the same seasonal level.

Of the money they bring, £10k goes to A’’, £10k goes to A’’’, thus the original investors have been paid off. They have not made money, but neither have they lost it. A final £10k is invested, collectively distributed by the three players. Each of the three players find three players each.

There are now nine players, in groups of three. Each triad fluid money returns to the person who invited them, so A11 A12 A13 transfer £20k to A1, and A21 A22 A23 transfer £20k to A2, and so on. Each triad can distribute the additional £10k as investment.

This can cascade with the same pattern. Each triad produces enough fluid cash to cover the “double your money” of the original connection, while generating enough fluid cash to invest either as horizontal equity or as guarantee for lower levels or collaboratively with same level players to attract higher levels as described in the previous section.

If only two players are attracted, then the fluid cash will either double the connecting player with no investment money, or will merely cover the cost of the connector with £10k investment. If only one player is attracted, this will only cover the guarantee.

The reason why this pattern may appear different, and feel different in the reading, is because it is all based on attraction. There is no guarantee. This is not scalable invitation. The reason it is morally questionable is that it attracts players with the expectation that they need to find three other players for them to get their return.

So far in our entity, we have not thought about chaining giftors, which is what is being described here. We have only thought of chaining positively, of inviting and guaranteeing others. This is all positive, with no credit. What is described in this section is all negative, in the sense that people are expected to give with the expectation that they will get a return dependent on their behaviour -- specifically to find three other players.

This chaining of investors may appear strange in isolation, but I believe it occurs immersed within current economic flows. It is common for startups to attract angel investors, who in turn attract larger venture capitalists, and so on. It serves the interest of the givers to attract other givers.

Nevertheless, we should be wise to this potential dynamic. One way to avoid this dynamic from arising is to ensure that givers do not get a return, or if they do, it is only equal to the money they give. That is, they are excluded from the “double your money” protocol. Should there be sufficient funds, we may be encouraged to honour the protocol even if it was not asked for, but this is clearly a different strategy than actively inviting giftors to double their money, thus inducing the dynamic above.

4.29 competition versus collaboration

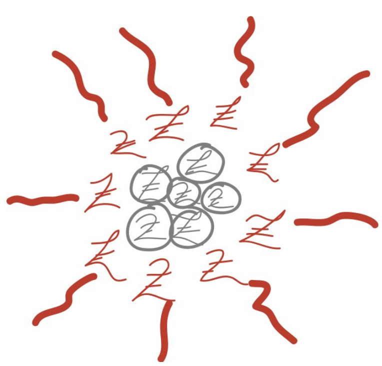
The relationship is fractal. Competition is nested within collaboration which is nested in competition which is nested in collaboration and so on. Two players at a chess board, competing one against the other, collaborating to play chess. This is cleared with GO, where the best move is evoked from both player’s top play, and appreciated by both players, thus reducing the importance of an individual winning. The emphasis is on collaboration. This is the emphasis within the entity.

To give a strict comparison: the tronic progression. There is an open source game, armagetronad, which is basically snake in teams. Instead of the money direction being determined before the engagement, as occurs in the scalable invitation, it is determined at the end. That is, with two teams putting up £10, the winner gets £20. They go on to play another team, the winner of which gets £40, and so on.

If competition is allowed to take precedence, in our minds, then confrontation will escalate beyond the agreed limits, producing conflict.

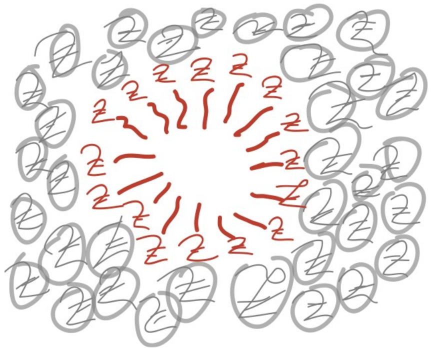
4.3 moneyphilic and moneyphobic aspects of being

A biological metaphor is the formation of the cell wall from hydrophilic and hydrophobic lipids. Instead of lipids, we are imagining people, some aspect of which is moneyphilic, another aspect of which is moneyphobic. Because our society has evolved the way it has, the moneyphilic side has determined the structures we are living in, living within the mistaken mental framework of scarcity. And in a world of financial scarcity, the moneyphilic aspects of us are drawn to these little clumps of money, while internal balance (almost an equivalence of Netwon’s First Physical Law) determines that people pull away, thus inducing tension and a pulling towards self, the sense of “taking”.

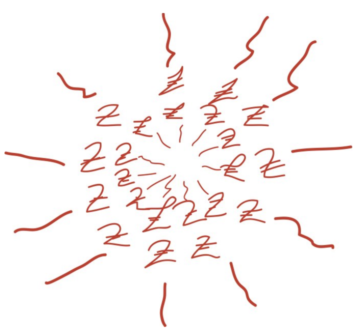


This creates a rather uncomfortable space for people who have money. Because, if you think about it, that little clump of money is actually owned by someone, a minority. Hence the perception that there is a scarcity of money. People are chased after for the money this minority has. People with money are beleaguered. And indeed, they often live isolated lives. Even when they are surrounded by so many “friends”, are these people attracted to them, their personality, their being, or their money, their possessions? It’s a scary place to be, in that

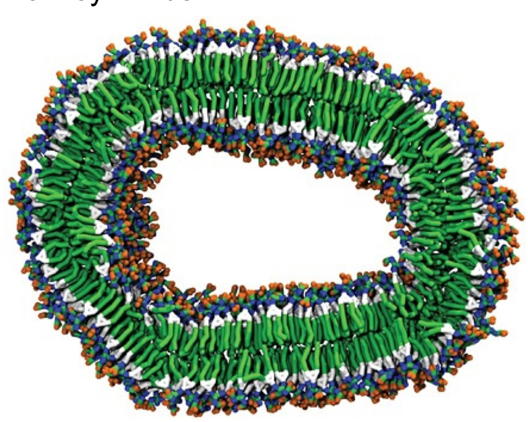
little clump of money.



Luckily, the truth is we live in an abundance of money. We can't make enough of it. It is a problem in fact, in terms of inflation, but only because of how we have allowed money to clump together. Even if we look at the previous representation, if there are people within that little clump, they are exhibiting force outwards, to keep back the money. Money protects them. In our model, we are exaggerating this outward push of money by increasing the number of people who are pushing money out. And what is felt within is a healthy human environment, free from the concerns of money.



Now, this may all sound rather strange. And this is why. Money doesn't exist. Not as an object at least. Things exist, for sure, but their value is humanly subjective. Even £1 will have a different value to a poor man and a rich man. The same £1 coin. If this is the case, the above diagrams make more sense: the side of a human that values money, and the side of the human that values other things. There are not "coins" of fixed value, only funny little flagellating monkey-minds.



(hydrophilic and hydrophobic lipids self-organising a cell membrane)

We may even see later, that part of the economic process of this entity is that it returns humanity to valuing important, real things, genuine needs like food and company and music and so on, rather than the convenient intermediary, money. And our metaphor might later be translated into seeing human being as valuephilic and valuephobic. Clearly we hold things valuable close to us, and those most important to us, deep in our hearts. We hold value-phobic aspects of ourselves as far away from us as possible. Translated socially, in this eco^2 entity, we push money to the extremity, and we only invite value within. But enough metaphor.

4.4 how is the money guaranteed?

The money is guaranteed because the person doing the inviting has the cash. Simple. They are in the black. They are not going to use the money for anything else. They produce it at the beginning of the contract, and it goes nowhere. Whether it is £10 over an hour or a million pounds over a decade, it is not used.

This may sound strange. But think about it. This is what happened to money originally, where gold was vaulted, even as late as last century. The money currency was guaranteed by gold bullion. Lumps of metal. The difference with our entity, is that the money is held on trust. It is not the owner who keeps the money in some vault. It is the inviter who holds it, though ideally it is held in the space between them, as it were, or in terms of the eco^2 entity, on its boundary.

The money is used to validate the trust relationship. No matter what happens, the person who is invited will receive this money. It does not matter if the entity dies away, there is absolutely no risk in this. Which is quite different than the current coupling of trust/faith/risk.

An automated process should be possible, where the money is locked from the beginning of the time period, to be released only to the person who is invited when the time period is over.

At any moment, the specific amounts of money “fixed” as guarantee can be translated as “***capital***”. The pattern of money fixed in this way, the hundreds of people working at an hourly rate, the hundreds at daily, etc, provides the “static” structure of the entity.

4.5 is the money that people bring used in any way?

The money used to guarantee the invitee is fixed, and the money the invitee brings is “fluid”. *The ratio of “fixed” and “fluid” at the different levels of scale, determines the integrity of the membrane of the entity in time.* It is important then for the inviter to be aware of the type the person they are inviting is willing to play.

A “fluid” player is willing to take the risk of letting their money be used. That is, they can invite others, guaranteeing their return. Normally this will occur at lower levels of scale. For example, a person who is invited at the £1000-week level can invite a few people throughout that week at

daily rates.

The “fluid” player allows a certain amount of flexibility to enter into the system. Specifically, the vertical transfer of money down. This can only be sustained by the rate at which higher scale players are invited. This creates a funnel effect, attracting more players, and greater returns. See below.

4.51 liam’s variation: person-limited invitations

Liam has come up with a variation on how invitations work and it seems to be simpler, but as a consequence limiting. What we have considered here in this doc is the notion of a “fluid” membrane of money which is used to guarantee a doubling of money of those invited. There is a problem with this, in that if I invite Brian for a week, £1000, some of the money Brian brings may be used to invite Charles for a day, say. That means at the end of the week, a total of £1100 has been paid out, not £1000, to double both Brian’s and Charles money-time.

Liam’s variation suggests that Charles guarantee comes directly out of Brian’s money and that’s that. Which means, at the end of the week, Brian only leaves with £1900, making a “profit” of only £900. This makes some kind of sense, perhaps, if what they produce in terms of value over that day actually attracts a further £100. Effectively, Brian is considering the ratio of how much he can invest and how much is attracted to the value produced by Charles. And of course, this holds true for me when I invite Brian for the week.

In addition, this segues very nicely to what an equity cycle is. Brian could easily invite Charles for a week, who invites me for a week. That is, there is a transfer of three lots of £1000, but nobody has made or lost any money. And yet, over the week, we have generated value, and hopefully that shall attract money (in terms of funding or “sales”).

Another advantage to this way of doing it, is that there is no tracking of “shared” liquid money. It is all based on paired, individual relationships. There is no “pot” or membrane, or transversal moneyflow, as it were.

The main problem, that I can perceive, is simply that this variation cuts the tie between the individual and the whole entity. It does not really matter what the entity does, since it depends very much on the relationship of pairs of individuals. Also, the doubling is only valid if the participants simply don’t invite others. The psychology is a little tighter, and the effect on how people engage may be less generous. I like the current model in my head, though how we actually go about tracking exactly where the money is, beyond the simple fixed guarantee, is a little tricky.

4.52 david's default - whole entity responsibility

The invitee must be responsible when inviting others, aware of the required sums that need to be

honoured for the following hours, days, weeks, that is when people leave, their “doubl your money” is honoured. Thus the fluid money is collectively shared. But how can this be tracked?

The fluid is projected into the future to cover the doubling of invitees:

- if the total liquidity of the entity covers the doubling of all participants currently, ***the entity is thriving***, and additional people can be invited with full guarantee of doubling
- if the total liquidity is less, then there is a certain amount of attraction required which needs to happen by certain dates to honour the doubling
- when liquidity reaches zero, the entity dies

At the initial living stage of the entity, at least in the first season, all money attracted to the value produced is not dissolved to all participants and then distributed by subjective enumeration, but instead assumed to be fed back into the fluidity of the system. This is one of the states of the various *decision gates* of the whole entity.

By starting with some £20k, the entity is considered to be thriving for about a season given the numbers and rates below:

μ (scale)	m (players)	total £
£10k=season	1	10k
£1k=week	5	5k
£100=day	25	2.5k
£10=hour	125	1.25k
£1=5mins	625	625
£0.1=minute	3125	312.5
£0.01=10secs	15625	156.25

4.6 what are the dangers involved?

There are two directions of foreseeable danger. Both will be mitigated by a correct model of the math, and an accurate accounting of hourly/daily/weekly/seasonal/annual accounts. Because of the nature of entity, the larger the scale, the more secure it tends to become. There is more money involved in guaranteeing invitations. If the ratios remain healthy as it grows into higher scales, the moneyflow for will be spread further into the future. For instance £10million for a century.

This direction leads to one of the dangers, that growth is too fast and fixed, effectively hoovering in larger and larger quantities of money for longer and longer periods of time. This can be curtailed by keeping the invitations at the human level. That is, the entity may not grow larger than £10million for a century. I am not sure what billionaires will do, but they can certainly use

their millions to invite thousands of millionaires should it come to that.

The second and more realistic danger, is that there is not enough fluidity in the system, and money is drawn out of the system, either at the bottom with mass numbers leaving with their £10-hour or a few £10k-seasonal players while the entity is in its infancy. These hiccups can be resolved with “cash injections” of giftors, or people funding the entity. It is a little like a sprinter who trips and has to speed up to prevent themselves from falling. It may result in a cascade in more and more investors merely to cover the pockets left when money is released. Money tends to run down the scale, from top to bottom, as people use their fluid money to guarantee those of lower scale.

In either case, the danger is not disastrous. Because of the automatics fixed nature of the guarantee, the invited player will always return with at least the equivalent of what they brought. So, if the entity collapses, because there is a shortfall of fluid moneyflow or not enough increase in the rate of new players, the guarantee is returned. ***Thus, failure of the system means that the player will leave with what they came with.*** And this lump sum allows a period of time for all players to continue living in traditional institutional terms, depending on the level of play they had achieved. Of course, this doesn’t prohibit players from becoming gifters or guarantors in order to re-energise the entity until this state becomes healthy at the “break-even” state of steady and healthy growth.

That is, it is all in the black. The entity is an entity of abundance. There is no debt or negativity whatsoever. Simply the distribution of money, across different orders of time.

4.7 who is empowered to invite? and how many?

Any individual is open to invite others if they have the money to guarantee the scale of engagement. It is all in the black. If one has the money, one can guarantee to cover the invitation.

There are three types of inviter. The standard inviter is a player who has been invited themselves, and they use their fluid money to invite others. They are working on the principle that during the period within the entity, enough players are found that will cover the use of the money they are using to guarantee others. By inviting other players, they are fixing the money as guarantees. The principle mechanism is guaranteeing fixes money for others, whereas by fixing their own money when they enter, a person is indicating a traditional headset (Pam’s 20th century behaviour).

A gifter is person who does not want to see their fluid money returned. Their money is used to cover the pockets left by fluid outflow. They can also invite others, thus fixing the money as guarantees. A gifter has been invited, and thus they are guaranteed their return.

Before an equation is generated, to help guide the design process, I intuitively see ***a direct relationship between the rate of invitation and rate of vertical growth***. That is, the higher the rate of personal invitation, the greater the rate of guarantee, the higher the ratio of fluid:fixed,

the greater the rate of "replacement", the greater the need for larger scale fluid money, the greater the rate of vertical input. And the converse is true: the greater the growth vertically, the greater the amount of invitation. This relationship determines the second order rate of growth of the entity.

I hope you can appreciate how significant this relationship is. My mind intuits there is a direct relationship between the individual behaviour and the "whole entity". There is a concurrency. Even though increasing the number of players vertically also extends the life-span of the entity in time, this translates as a natural connection between ***inviting someone today and long-term well-being***.

By allowing anyone to invite anyone else, there are a few advantages and dangers that require some further consideration, but these lie outwith the specification of this document and are covered in the complementary document, wise^0.

4.8 general equation of "incoming"

"Incoming" in terms of money that is attracted to the entity as well as invited. On closer inspection, and ideally, there is no supply of money from within the entity. There is only moneyflow around the outer boundary of the entity. This takes a little to get one's head around. As outlined above, is it possible for the mere engagement of the fractal social contract able to supply enough money for it to work?

There is something mind-bending about this. Can you see why...?

A compact mathematical equation to model these factors is desirable. To map the variables, produce a phase diagram (at least in three dimensions), to observe any cusp or critical points. This will be able to derive a guideline to the ideal amount and time and mindmass to estimate the minimal and optimal thresholds to start the eco^2 entity. This has nothing to do with conversation of value to money which is inherently unstable and risky, however much it is the staple methodology of traditional business practice (see below). In the eco^2 entity, can the the flow of money at the boundary sustain the number of players, whether gifters or guarantors, whether fluid or fixed, providing a rather stable model for growth of the entity?

(Consideration also must be taken for the apparently base ten increase vertically in scale, which is skewed by the odd "human" step changes in time, ie hour to day to week to season to year; the maths is deliberately not "metric".)

4.9 operational model and outstanding questions

The operational model is the mathematical model in action, ie as moneyflow is tracked concurrently. We will be able to see how many people are involved, the vectors of moneyflow across different different levels of scale, and thus we will be able to estimate how many people we may invite at any given hour.

There a number of relationships which are covered here in this proposal, and even if we hack out a maths model, generate the threshold criticalities, the most important thing is people's behaviour. This needs to be experienced, and as we progress, we will learn. The

There are a number of outstanding questions, some of which have been explored in this doc to be validated through practice, while others are outlined here:

- what about completely closed loops?
- how much automation will be allowed? specifically regarding the redistribution of fluid moneyflow
- fluid moneyflow may not necessarily go down, as eg a high scale 100k-year player hits the end of their period, money may be siphoned up, even from hourly entrants
- is there a simple "income-outgoing" balance that can be conducted on an hourly basis? is this a perfect zero-sum game?
- can we use the funds generated from the translation of value to money, eg with action cycles, to cover the movement of money in the scalable invitation membrane? or is this just another version of tripping up, causing the system to fall into some kind of self-supporting disorder that current organisational forms suffer from? perhaps it should only be used if the entity is wrapped up, if it doesn't break-even in terms of rate of growth?
- is this a pyramid scheme? of course not heh, but i have to write this somewhere... it's not employment or a bank either, but it performs those functions too...
- is there an impersonal transaction? a large pot of money? as far as i can tell, the money stays on the outside of the membrane, and does not aggregate as in a pot... is it like a distributed pot? perhaps... is there value in determining how much money-fluid is spread throughout this membrane on any given day...? or does it need to be calculated in terms of its scale, and indeed time...? pot thinking is static, it seems to me... the aggreagate of "fixed" guarantees gives a structural account...
- it is best to think of the whole thing from the middle, rather than the bottom since an hour is not functional in terms of the time within which an invitation may be operational...
- at the lower levels, a completely self-contained domino invitation, an equity cycle, can be used to not only justify time within the entity and thus benefits from the surplus, but also creates time within which a higher level player is attracted to double their cycle

(5) subjective enumeration

The internal mathematics of the system is quite easy by comparison. Why may you ask? Because essentially it is based on being, and as beings, we are equal. But let's take this one step at a time, considering how we evaluate subjectively, before we consider how value can be converted into moneyflow.

5.1 subjective enumeration 0-10

Subjective enumeration is simple. When asked how valuable someone's contribution is, simply apply a number:

1-4 is good
5-7 is damned good, quite remarkable
8-9 is amazing, superb
10 is exceptional, unheard of, incredibly rare, unique

This is the base subjective enumeration. It takes a little practice, but it is simply a matter of just letting one's mind come up with a number. There are factors to consider:

- the actual experience
- the potential
- the resources brought
- (how much time they have contributed, which is automated in below's outline)

5.2 relative to total evaluation over a period

There are different ways to play with this subjective enumerated value. One is to use a multiplier (see 5.21 below). Another is to have a fixed number over a period of time (see 5.22). The maths, the practice, of what is most useful for us internally to those in the entity will, will evolve over time. The decisions on the maths will slant the kind of mathematical experiment that is being conducted, and it would be wise for us to choose a mathematical experiment that brings to the fore giving, so that those who are providing the highest value (in a deeper sense than money or traditional organisational skill) rise to the fore.

5.21 significance multiplier

And further this figure can be multiplied by how valuable the engagement is in comparison to the sum total of value one is evaluating over a period of time. This multiplier can be estimated either in terms of its significance psychically, how deeply moving it is, or its corollary in terms of social manifestation, how relevant might this be to people. Consider the following multipliers (which may eventually be derived as a power function to some equation of mindmass, 10 to the power of the number below is the number of people):

- 0 - of personal interest only
- 1 - relevant to a handful of people, family (ten)
- 2 - relevant to a human network, village (hundred)
- 3 - relevant to many, small town (thousand)
- 4 - relevant to many, large town or neighbourhood (10 thousand)
- 5 - significant, small city (100 thousand)
- 6 - significant, medium city (million)
- 7 - significant, large cities (10 million)
- 8 - exceptional, nations (100 million)

- 9 - exceptional, continental, super-power, (billion)
- 10 - essential, relevant to everyone, planetary (10 billion)
- 11 - for sustainability into the distant future (100 billion)

5.22 fixed evaluation

The total number of evaluation-points a person uses over a period of time. For example, if we take a base figure of 100, then each point is a percentage point. This means that over a period of time, say a week, you are giving a share of what you value.

This setting exchanges simplicity and stability at the loss of flexibility by keeping the number of total points open-ended. This simple and static relationship might lead to a collapse to thinking of the subjective enumeration as money.

5.23 shared value

It does not really matter how we allocate this evaluation, in a sense. In the strict sense that it is a mathematics based on an individuals evaluation. There may be enough flexibility in the system for different people to innovate different means of allocating subjective evaluation, such that a maths system reveals at the collective level, those individuals who have contributed well to the health of everyone within the eco^2, and indeed to those beyond its boundary.

Essentially, each person has a value of one, and their evaluated numbers are effectively fractional quantities. The maths of fractional evaluations of individuals is subtle. What is important to stress, however, is that because each person has a value of one, there is a base line of equality. Which means, that when we consider the division of surplus, it ought to be divided equally. If you are being, if you are constituting the entity, you get an equal share of the produce of that entity.

$$f(p_i) = \frac{S}{N}$$

(where p is any person i, S is the surplus and N is the total number of people)

It looks simple. And it is. How much we will be able to live to this within the entity, will determine the success of the entity to help us transition from a world of money-making to value-creation. If

participants bring with them notions of groups, of separation, then this will mean that this simple equation will be unattainable, and confused by all kinds of reasoning. For example, there may be an entity that is “african” versus “american”, because, quite reasonably it appears, the surplus money made in america will have a higher value to members of the entity living in an african village. Or perhaps there will be different entities that exist at different levels of moneyflow. Seems reasonable.

Or, within the entity, people begin to justify that only those individuals who were involved directly with producing a prototype, say, deserve a fraction of the money that may be attracted to it as a result. All quite reasonable. But the path of division between us is a slippery slope, and it is with complete conviction, that the closer we cleave to the truth of the above equation, based on the simple maths that everyone is equal, and all our evaluations are essentially equal, that everyone deserves an equal share of the entity’s “produce”, that is, an equal share in the “interest” that constitutes the entity’s “social capital”.

$$\forall(p_i) = \frac{1}{N}$$

(where v is the value of any person i, and N is the total number of people)

Should stand.

5.24 fractional division by period versus continuous distribution

One simple bias is to fraction the amount of time that an individual participates within the entity. For example, if money-flow results every week (like “wages”) and someone has only be present within the entity for an hour, they can not be expected to receive the same as someone who has spent the entire week constituting the entity.

Fractions may be allocated as follows, based on a weekly “wage”:

- 7 hours in a day
- 7 days in a week

This may be an academic concern since the model that is used for the division of surplus may be conducted hourly. That is, at any moment, surplus is divided immediately to everyone who constitutes the entity. If you are present when some surplus appears, so you receive your equal share. Temporal fraction, with this math model, becomes redundant. If anything, a continuous distribution of surplus will mean a tendency for people to wish to be part of the entity continuously, rather than on short-term invitations, to benefit from surplus occuring on the other side of the planet (wrt daily invitations), or over weekends (wrt weekly invitations).

5.3 value is experiential


These green dots represent value created internally. This may mean the building of some prototype, computer or physical, producing some designs or some music, or growing or cooking food, or providing some tools or advice. It is all about experience. This is not about money or things. It is about experience and what people offer in terms of resources.

The evaluations given above are not a substitute currency. They are subjectively enumerated values. This replaces the need for money. They are a record of how valuable people see their engagement with others. There is no absolute evaluation, no “objective” or authorative enumeration anything close to money.

The maths based on this might be interesting, the distribution pattern of a person’s evaluation over time, the mean and so on. It might be possible to see who is producing most value, in the eyes of others. It might even be possible to apply the value algorithm similar to google page rank. Consider the initial starting position:

$$\forall(p_i ; 0) = \frac{1}{N}$$

(where V is the value of any person i at time 0, with N the total number of people)

And the iterative equation which tends to a relative value of any person to any other person in the entity:

$$V(p_i; t+1) = \frac{1-d}{N} + d \sum_{p_j \in M(p_i)} \frac{V(p_j; t)}{\sum_i V(p_j)}$$

(where V is the value of any person i, d is the "damping factor", N the total number of people, M is the set of people who evaluate person i, the value of pj at time t)

Such an equation might highlight particularly "valuable people". It might also be used to root out those individuals or cliques who are gaming the system, producing "fake value", who are in it purely to take advantage of the doubling protocol at the boundary entry.

This kind of equation is something that will be useful for sure, and will evolve over time, as the entity evolves, just as google's page rank algorithm has. Nevertheless, it is essential to emphasise that the design of the entity has its own values (mine I guess;), and that is for equality. These are merely number games. What happens in the real world is what matters. Whatever equations we produce that play with subjective value is gameable only in the sense that we use the equation for us to highlight those people whose work, effort, insight, we actually value. It is hoped that gaming induces a positive value.

Which is why so much effort is being made to design the outer boundary as self-enclosed as possible. If the outer boundary that constitutes scalable invitation (#4 above) has its own sustainable "income", it means that everyone within the entity has at least the money they brought covered, and if the entity is healthy, then they are guaranteed to double the money they brought. At whatever level of scale, this entry guarantee is a healthy living, individually, in current 2012 prices. It gives those within the entity the best environment for them to produce value, simple, without the need to make it commercially viable, and thus compromising their ideals and ethics and design to "fit" the current organisational situation, the mess of bureaucracy and money-making directives.

5.4 sharing the surplus

At some stage, however, something of value may be given to people outwith the eco^2 entity and there will be a return of money because that is the way the current system outside, enculturated and institutionalised, performs. The question is, what to do with this money?


Any money generated by the transformation of internal value to money, is profit, or ***surplus***. Remember, in terms of the entity, value has been produced, and with a large enough population, the value is functionally useful. Job done. However, as the entity exists in the current economic climate, and especially at the very early stages of the entity, value will no doubt be externalised to the benefit of those outwith the entity. And if this is appreciated as valuable, job done. However, money will tend to flow as a result.

There are several ways this may be distributed, and for the purpose of this proposal, I am going to suggest that we take the simplest and the most profound. Everyone gets an equal share. Simple.

$$f(p_i) = \frac{S}{N}$$

(where p is any person i, S is the surplus and N is the total number of people)

From the perspective of people who have been working directly on a thing, a prototype or service for some kids in care in Harrangey, this may sound unfair. Consider the implications. Let’s say a network of people produce a book or a film, and generate funds of thousands or millions of pounds. Surely this should be shared only by those who contributed directly? Even to distribute this equally is to discount the different efforts that people put in.

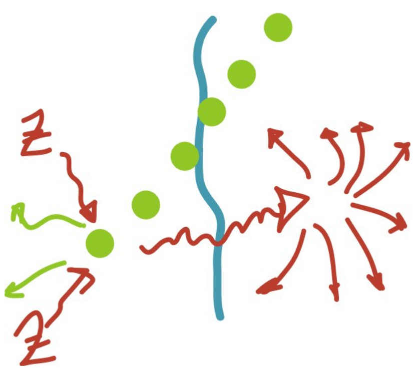
Even if we have a straight simple sharing as described above, consider what it is like to work in a company. Consider how you move around in an office, collaborate with colleagues. Regardless of the wage differential, it is comforting to know what everyone in that company, no matter where you go, is working on producing value that results in a product being sold somewhere and “money being made”. Just like the eco^2 entity, money issues are left at the door, so that people can simply do the best they can. The difference is, the company positions are fixed, and this acts as a break for social innovation, and immediate and honest appraisal of value. The hierarchical latticework of positions is a legacy of traditional organisation, much needed in the

past to stabilise complex social structures. Which is what marks out the new eco^2 entity. It is based on network, and tracked subjective enumeration, which enables a more fluid, responsive, and genuine person to person engagement.

Imagine being part of an entity where everyone you see, everyone you meet, is working towards producing value. And that the result of this value, should it meet with financial reward, you will get an equal share of. You can help anyone, at any time, and thus contribute to their efforts. There is no competition, but friendly competition, since it is about producing the best value, not in terms of money, but in terms of tricky to describe human value: aesthetics, ethics, compassion, fairness, excellence.

Nevertheless, a straight and equal division would not be making use of subjective enumeration, and it is this that redirects the flow of money so that it reflects the efforts of individuals and their unique contributions. So, our subjective enumeration performs the function of “weighted money”.

5.5 weighted moneyflow



Let us say a book attracts £40,000 and eight people worked together to write and produce and market it. The amount is split up equally in terms of numbers of people. (Whether we balance this in terms of the amount of time that people were present in the eco^2 to make this, giving fractional amounts, or it is distributed to everyone who is present at the end of the project, as continuous distribution.) Effectively it is about calculating the number of manhours, and dividing the sum. These are shown by the little arrows in the diagram.

But instead of each person receiving this fractional amount of money, it is immediately divided in the ratio of the subjective values given throughout the project’s history, and in the relative ratios between people. That is, if one person only worked an hour, and their contribution is not considered astronomically important, they will end up only receiving a small percentage of the money that is directed towards the person who worked for a month. So the subjective enumeration acts like a weighting system.

In the example above, let us say that everyone has spent the same amount of time and are present at the end of the event, and they get £5,000 allocated to them, this money is distributed

through the enumerated values that have been given throughout the project. If I worked with Nick, Lloyd, Pam, Sal and Juke out of the eight staff, and gave them fractional evaluations of 0.4, 0.2, 0.1, 0.1, and 0.2, then Nick would receive £2000, Lloyd £1000, Pam and Sal £500 each, and Juke £1000. I appear to get nothing. However, I am getting the fractional values from all the people I worked with, and this sum might end up as higher or lower than the base average of £5000.

If we derive a google-esque network calculation, the money flow can be distributed proportionally before this money flows. And we can do this not only with eight people around a specific project, but everyone within the entity across all projects.

Is this considered fair? The weighted moneyflow, so that perhaps the original writers are estimated by their fellows as contributing most value and thus get the highest split of the moneyflow. And if this can be done with a sub-group of the entire population of the entity, why not extend this to include everyone in the eco^2 entity? Imagine, even if you don't produce anything of value that has a monetary return, you get a small amount from every project that converts into money.

Imagine, everyone working in the hub, everyone, even if you haven't spoken to them, is actually working on producing value, most of which converts into moneyflow at some stage. And if you think about our current situation, this is what is happening as a nation, Britain plc, USA Inc. Only, the largest entities that are based on traditional financial structures, these social objects of government and corporations, can not form a global entity. The closest that has been managed is the United Nations, and it doesn't take much to recognise the arthritic rates of change that the UN is capable of.

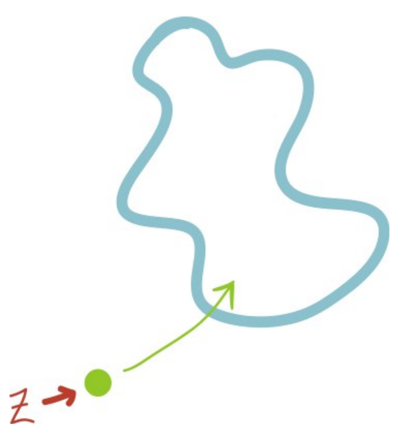
The eco^2 entity is more flexible, and not only leveraging the power of the internet and rooting value in real-world person-to-person engagement, but also giving humanity an opportunity to deal with the massive environmental collapse that traditional organisational structures and moneyflow have produced. Eco^2 offers us a vehicle, a means, for humanity to create sustainable relationships, and a sustainable global society.

(Questions of who actually constitutes the members of the entity will greatly influence the surplus division. If anyone on the planet can use the "scalable invitation" mechanism, does this mean they are part of the entity as a whole? Or does this mean they are a separate pair of people? Can there be separate groups? A simple, first draft version, is to divide the surplus derived from the value produced by people to the network to which those people are connected. That is, for the isolated, self-selecting pair who are not connected to anyone else, value that is produce by them, which attracts money, is divided by the two of them, only.)

5.6 outstanding questions

- what do we do with people whose projects don't convert to money? There is bound to be some maths here.
- why not make dividends relative to the period of engagement? That is, is surplus divided every month like a wage, or hourly? Or is it calculate when the person finishes their period? Which means that it is worked out hourly for £10-hour contracts and annually for £100k-year contracts. I go for everyone getting a regular dividend because it is everyone that is sharing any money produced.
- what about projects that only return money across payment periods? If I worked on film for an hour, and then two years later, it generates millions, do I still get my cut? Depends on whether subjective values are tagged to projects....
- Some subjective evaluations points may be given for invisible contributors, eg the people who care for the servers that enable the electronic platform being used by players. The original bunch of designers...? this needs to be sorted out... are they simply invited, kept in the loop? or are they subjectively rated?
- do people who are rated, even though they are not part of the entity, get a dividend?
- does the person include themselves in subjective enumeration? possibly... it could solve some of the problems, but it creates others, a vector of selfishness...
- does the entity perform the function of pensions?
- some dude goes potty and starts inviting everyone under the sun... i guess this is limited by their μ level... but what if a high-μ player, with eg £100k, starts inviting hundreds of £100k players? will such equity cycles imbalance the whole entity?

(6) macropatronage



Another means by which companies can enter into the entity by funding a very valuable individual. Effectively, it will become clear that most value is created between us, but there is still plenty of understanding that the value resides in individuals. So, to take advantage of this cultural appreciation, such individuals who are especially active in producing social value, much like musicians or sportspeople, are "sponsored". The funds directed at them, can guarantee the invitation of many people who might otherwise struggle to

secure funds.

Macropatronage is explained in a prezi.

The basic relationship of macropatronage is tripartite between companies, social artists and media. By entering into this contract, the social artist agrees to have their name tagged by the company's name in all media for that period, say £100k for a year. It is like the badges we see on racing car overals or golfer's hats or footballer's shirts. The relationship is tighter, and where-ever that social artist's name appears, so will the name of the company. This includes primary material such as posters, articles, books, and so on, but more importantly in secondary material such as when the social artist is reported, such as newspapers, blogs, and so on. Hence the third party, media. Everyone who writes about the social artist is in effect supporting that artist because it guarantees that by the end of the year, that artist has some credit with which to get another year's endorsement by the company. This happens any way, of course, it is just that traditional media had evolved a clear distinction between editorial content and advertising. This has become somewhat warped, where the choice of editorial is affected by the potential to attract advertisers.

The macropatronage relationship provides more power to the social artist, if they can cope with their name being associated with the company. This gives secondary media pundits a means of making their words count, by directing more attention to those social artists who are getting it right. And of course companies benefit by brand placement before their target audience, as well as associating themselves with innovative social business and genuine social good.

In the end, it is a means by which we can draw attention to social artists, who are currently outwith the direct attention of money and attention. In fact, the first ten social artists funded for a cumulative total of £1m will attract a lot of social media attention even though they have a year within which to produce their social value.

The original mechanism of going to market was to secure £100k for nine social artists such as Michel Bauwens of the peer-to-peer foundation, and Tav and his espians, and Iain Shaw from Media Education. Funds were to come out of CSR or marketing, to pay for the secondary advertising that the artist's actions provides. The tenth person was David Pinto, me aka happyseaurchin (just google it), whose social art is this macropatronage relationship.

With regards to the eco^2 entity, the original funds given in the form of macropatronage are the cash injections, the giftors, the attractors which are described throughout this document, the proposal, the math doc, and any associated material including spreadsheets. It is the coupling of money to people who produce social value. It is up to these individuals to produce the goods, invite the right people, so that amazing things happen.

Whether this takes the form of £100k for the following year, or £10k for three people over the first season, one strategy that will be followed throughout the period will be to attract more funding

through the macropatronage of social artists who agree to use the economic entity as the main vehicle to create the value they see. This can work at whatever level or period the artist agrees to, from one hour to a year or more, again bound within the “quanta” of financial levels, from £10 to £100k or beyond, from kids who are still at school to big-league businessmen. The macropatronage is entirely scalable, and fits nicely in the ecology of the eco^2 entity.

birthing the eco^2 entity

This open-access document outlines a proposal to birth (“kick-start”, “start-up”, “capital-inject”) a new economic entity, nominally at the Hub Westminster.

Can we save the world, and still be paid for doing it?

The massive loss to our biodiversity, the impending environmental disaster, can only be allayed if we change our social practices. The determinant social meme is money and the institutional forms that have evolved over the centuries. A new form of ***eco***logical ***eco***nomics is called for, one which returns money to the transactional intermediary it once was, liberating our fundamental -- and simultaneously highest -- human values.

The eco^2 entity is not a company or a bank or a shop or a pension scheme, and yet it performs the same transactional functions through a single ***self-similar social contract***, while inducing a ***culture shift*** from money-making to value-creation. The environment within the entity is purely peer-to-peer, affording a ***collaborative commons***, and all money derived from value creation is ***equally distributed*** through a system of weighted subjective enumeration. A real-world, trusted and ***embodied network*** reveals a set of social solutions which lie beyond the reach of traditional, bounded organisations like companies, charities and government bodies. Precise ***open-space technologies*** such as non-directed meetings and action cycles provide the depth and speed to complement traditional organisational mechanisms, and constitute a ***methodological shift*** in business practice from information and knowledge to not-knowing and wisdom. Individual practice directly influences the health of the entire collective eco^2 entity, ***inviting and attracting*** exponential growth based on genuine and mutual experience.

“a light touch by several is much better than a heavy hand by one”

This is an open invitation to create personalised proposals.

I, David Pinto, wrote the description above, and I know that it makes for ideal reading for only a few people. Similarly, most of the material of the original eco^2 document has my characteristic turn of mind. Not just fingerprints but my grip marks are all over it, even though the eco^2 can be birthed anywhere on the planet in any cultural space that uses money. This is an open invitation to create your own personalised proposal.

By creating a range of proposals, the choice of a specific proposal for a specific context is determined by the one which fits the conditions best -- that is, the people who are present. Whatever the choice, it is easy to read stuff on the net and watch a video, but only in a real-world meeting is there a genuine potential for co-creation, since we can respond live to one another. In this way, the eco^2 manifests in the space between us, and indeed, the best way to come across the proposal is to be invited.

The following proposals are based on material from the original eco^2 document, with additional personalised content and style.

- proposal^1 - a snappier written version of eco^2
- eco^external - a cool prezi of eco^2 with an “external explanation”
- eco^boundary - prezi of eco^2 used when people engage at the boundary
- eco^internal - prezi of eco^2 when people engage within the entity
- proposal^crowdfund - a crowd-funding initiative

strategic concerns

These proposals are related to strategy. That is, who to approach and how to approach them. It is not entirely clear who might be able to see the potential of the eco^2 and be willing to implement it, participate in it, fund it -- birth it!

The entity does not need to be based in any physical location, though it is embodied by people and thus a space is required. This could be a living room, a kitchen table, over a table in a coffee shop, in a hotel lobby, or shared offices. The benefit of having a fixed location is that it is simple enough for people to currently understand. Eg, if you get invited to Hub Westminster, your money is doubled. Simple. Attractive.

This leads to a major strategic principle. We need to start simple. The first iteration, the first season requires only that we have basic proposal, a basic maths equation, and a few committed people. The processes outlined above must be simple. The self-selecting filter is simple. It may develop in complexity, with different layers, with different people offering different services, all complementary. Nor do we need to worry about tax, at this stage, because it shall only become an issue once it is working and there is substantial moneyflow. Once there is substantial attraction, moneyflow, production of value, problems such as tax will need to be dealt with, or how people start to game the system, and so on.

So, who to approach? Generally, social spaces. Spaces that enable a good working environment. This will progress into whole businesses shifting into the eco^2 entity, but initially we need a flexible enough space to be able to invite strangers, give them a chance to self-select and filter, so that we can produce value quickly enough for people to understand why they may want to take part, beyond it being a way of “making” money.

- social business hubs like hub westminster or the cube, to attract and host more

members, and fulfil their social business remit

- venture capitalists, if they can get their heads around an “embodied network”... after all, when they invest, they invest in the idea, the tech, but primarily the people -- whether the entrepreneur can actually do what they say they will do... like this, but with people and service being the product... of course, with the confluence model programmed, this might be the way in to providing the world with a truly global social network, and this leads to tav’s decentralised espra system... (i hate having a split between facebook and google... it just doesn’t make experiential sense, i want one social graph on the net)
- hotel chain, coffee-shop chain, restaurant chain, so that such places generate money from more people going to their space... i suspect this will only work once people become a regular at a space, and only then may they start getting discounts etc, privileged spaces, perhaps opening up during quiet times and so on... unless they are invited as a member, a player, to fund the whole enterprise -- if so, this will happen at a higher level, not at the level of “user”
- dining rooms, kitchen tables, where-ever anyone wants to manifest the entity, home-style
- charities, campaigner hubs, to secure an alternative means of funding...
- google, amazon, apple... forget apple, but google might be interested in the notion of a manifest web, based on in-person engagement, which might be taken as an expansion of the google office culture...

software

The inevitable question about software. Of course, we need some software to track internal processes, who invites who and so on. It is important to emphasise that this is not necessary. Eco^2 works in the real world between people. Simple. Bits of software can help us connect, collaborate, co-create value, but it is not essential. It is *not* the primary concern.

A basic system shouldn’t be too hard to code to do the basics:

- members given a unique identification number
- track who invites who, graph this
- secure money location for guarantees
- displaying state of play, how many participants
- math model offering suggestions of how many can be invited and need to be attracted

Various tasks can be externally outsourced, using google docs for example, or turtle to ensure a safe friend-to-friend network.

The next version is something along the lines of the Confluence Model:

- intention system, to map what people are hoping to do
- coupling system, to help people actually work together to achieve objectives
- conditions system, to help people remove conditional constraints around others

The final stage runs tend towards Tav’s Espra system, a fully distributed system which may

even replace the internet as we know it. This might sound scary, but keep in mind the event horizon for the current internet is visible. There are plenty of signs that we have peaked in terms of the explosive and expansive spread of the internet. We are now collapsing back into traditional packages. The three biggest signs are

- the recent movements with SOPA and how political bodies are attempting to get their grips on ISP and the content of material served to your computer
- countries buying their own version of the Chinese firewall, which means that geo-political boundaries will be mirrored in the virtual world
- and a rather enigmatic statement by Steve Jobs back in 2008 when he saw a shift from search to app... a rather strange adjunct, but suggesting that people will not access eg wikipedia, but turn to more trusted, authorative accounts in apps... that is, and end to open and uncertain to closed and secure

tracking money

How do we go about tracking where the money is?

With the small amounts we will be starting with, this can be done in person, and tracked using something like google docs. An advanced system will need to be developed that tracks money between people.

first iteration

ideal model
The ideal model tracks the fixed guarantee, the matching fluid money, the subjective enumeration, and the distribution of value-to-money.

Each coupling has three gauges:

- the amount that is guaranteed or fixed
- the amount that is matched, minus any amount that has been used to invite others
- the amount that has been gained from surplus

If A invited B for £100, and B invites C for £10, then the accounts are as follows:

- AB (100,90,0)
- BC (10,10,0)

Surplus is distributed equally to individuals and potentially redistributed through subjective enumeration weightings. This surplus acts like fluid and tops up the matched amount, to cover for the money that has been used to invite others.

decision gates for the eco^2

There are various ways the eco^2 can be structured, and these constitute decision gates. We need to decide what the best states are for the different decision gates at the birthing stage, partly for us to conduct ourselves well, and partly to simplify the process of explanation to potential “fathering” funders.

The gates are not discrete parts, but the various states interact so as to give the entity quite a different systemic feel (to us members), or function (the whole entity).

The gates:

- person-limited invitation v. whole-entity responsibility (liam/david variation)
- value-to-money attraction fed back in directly to doubling v. distributed equally to individual members
    - distributed equally v. distributed equally then re-distributed by subjective enumeration weightings
    - discrete surplus v merged surplus with fluid
        - capped merged surplus v uncapped
    - slider on how much surplus is kept and how much split through subjective enumerated weightings, eg 50/50
- attracted money can invite v. can not invite
- value-to-money is a discrete “back-end” process v. become attractors at “front-end”
- value-to-money distributed across connected v. discrete, local, non-connected group
- invited people can v can not be re-invited during their term
- solid guarantee and fluid invitee v solid-to-fluid guarantee
- discrete surplus v merged surplus with fluid

The various states produce a different eco^2. We need to make a decision as to what whole system we wish to have at birth, partly so that it is manageable considering the limited technical support systems we will have right now, as well as partly how easy it is to explain how it works. We can also suggest an ideal system, which we will phase into, at a rate which is reasonable for the entity. The danger is, like the communist system, it gets stuck in one system and doesn’t evolve to its intended form. We must be very wary of this.

eco^2 birth state

Initially, anyone who participates in mttp gets an equal share of the attracted funds on a weekly basis. It does not matter whether they are connected or not, though there has to be some knowledge of the disconnected pairings and groups. Such individuals who start the eco^2 entity may be called patrons because they are bringing their own money into the system, they are adopting mttp.

For the birth state, any money which is attracted to the entity or any of the projects is distributed equally to all members of the entity, and it is merged with their fluid funds which is capped. This means that people will leave with double their money, and any extra money that is in the system, is used to honour the doubling other people still within their social contract. At some point of health, surplus will no longer be capped, and people may leave with more than double their money. The simple effect of this is, people can invite others at the rate they know they have money for.

Surplus is distributed on a weekly basis, and fractionally accounted for depending on the amount of time someone has been engaged in the social contract that week.

eco^2 ideal state

Ideally, the eco^2 entity is one thing. We manage to scale internally, remain sensitive to the boundary, and honour everyone's invitation by doubling their money. Ideally, the entity is thriving, where the money-flow which results from the production of value is more than enough to cover the doubling of invitations. Which means that people decide to pour their surplus back into the entity in the form of invitations. This means a direct relationship between individual's behaviour and the entire entity, which means the decision gates are set as follows:

- whole-entity responsibility: invitation-money is tracked, resourced, from higher-μ (larger-longer money-time) to lower-μ scales as they leave
- connected distribution: all value-to-money attracted is divided equally to connected individuals
- immediate distribution: all value-to-money is distributed equally immediately on payment
- weighted values: all value-to-money is distributed immediately through subjectively enumerated values
- invitation only: only people who are invited get to invite others
-

For this system to work, we need a way to track money flow. An account that tracks the number of people at any given moment, so that when money is paid into the account, it is immediately distributed to all concurrent members, and then distributed by their subjectively enumerated weightings. This means that we need to track subjectively enumerated weightings, with an app or through web-browser. And this needs to be all secure, of course. And as for the whole-entity responsibility, money that is brought into the system through personal invitation is also tracked in a fractal pattern. Ideally, this system is actually peer-to-peer, with requests for money flow being micromanaged by discrete nodes. That is, David's node will request for their "doubling" when they leave from Mark's node, etc, those who are staying for longer, creating a kind of constant cascading of money flow from higher levels.

Of course, it would be nice to have such a system running in such a way that it is entirely transparent, at least at the whole-system level. Individuals may have their distribution secret.

options

A variation to merged fluid surplus, where surplus is not merged with individual accounts, but where some of the surplus goes to the individual discretely and some is distributed generally. The surplus-thriving gate is set to one year which means the entity's fluid funds honour a year's life of the entity. Thus, the entity is considered to be thriving for a year ahead. Which means, when surplus is attracted to the value produced within the entity, it may be directed towards ensuring the entity is thriving. Only once the fluid funds exceed a year's period ahead, is it distributed equally to everyone within the entity. Money that is directed to individuals is put into their fluid account, with those who are leaving first.

People who self-select to put their own money into the entity do so in one of two ways: to guarantee an invitation, or to pay for the value of the entity. By entering into mttp (money-time-trust-protocol), there are two options: inviting someone who is already invited, or inviting someone who is not. By inviting someone who is not, a discontinuous graph is produced, where it is a pairing that is disconnected from everyone else in the entity. In this case, the dis/connected decision gate will determine whether such individuals get an equal share of the surplus. By inviting someone who is connected, this can cause a rather complex overlapping of money-time flows, and a corresponding complexity of distributed responsibility.

At the high-end, when someone is invited for £10m for a century, the fixed guarantee loses meaning. What is the point of fixing money for a century? Thus, it may be appropriate for the invitee to turn that money to fluid too, so it can be used by people now. This may also be actioned at lower scales. A person could make the guarantee fluid even if it is £100 for the day, should they so wish, but it makes little sense.

Self-invitation appears to be a separate thing, but I think on deeper reflection, it will be found to be related to a combination of decision gate states. To start with, it seems reasonable and simple for people to give money to an individual in the entity; that is, for there not to be a need for the person in the entity to match the money given to them. It is simple enough, a personal gift. Let's distinguish this from macropatronage. To match this with mttp, it is suggesting that time is taken out of the equation, and money is directly given to the individual. In return, the person is given a period of time as a guest within the entity equivalent to the amount of money given. In this way, the relationship is one of exchange, money for time. One can consider this to be a ticket price for an exhibition, say. Ideally, however, this form of relationship is phased out, and people have the choice of inviting, as standard, or to pay for the value of the entity, in which case the money is distributed to everyone directly.

remarkable observations

explorative engagement at hubminster 2012 0117

I engaged several people at the Hub Westminster on Tuesday 17th January 2012.

- nick from 00 architectural firm
- lloyd, the mendicant social artist
- tony, the accidental arahant
- yogesh, a freelance designer
- janet, a marketing guru
- sal, on the bullet train of lean business
- paul, the young-wise visual facilitator
- alberto, the italian bright-spark

Some were invited, some were accidental, some were known to me, some were strangers. It was an interesting experience. The confluence with Nick was astounding, and though I shifted from sharing and exploring towards a more pushy and convincing state, the following observations were brought to my attention which need to be fed into the system outlined above, and worked into some kind of proper proposal:

- the membrane constituting the scalable invitation is an adaptor or translator, from money to value
- consider testability: proof through being able to perform the same functions we are familiar with, eg being able to invite a speaker to give a talk at the hub, producing a sellable prototype, and so on
- biological metaphor of lipids, hydrophilic and phobic ends and the formation of the cell, the necessary barrier for life... equates to the boundary as moneyphilic aspects of people meet at the boundary, creating a moneyphobic haven within where value is created... cell walls which we find in plant cells, matches the fixed and static socio-political structures of businesses that we are used to
- potentially scalable groupings, where money cascades through respective groupings, based on the mechanism of evaluating how well a conversation has gone rather than each individual... though my intuition is that value-turned-to-money ought to be split equally to all participants
- minimal membrane of balance of 3 people, each inviting the other in a cycle... consider the smallest order of group that may occur mathematically and still meaningfully
- major threshold where money within the membrane equals the money without... but this is a major leap down the process, predicated on the outcome that the non-group can grow indefinitely, rather than reach some kind of stable state, eg dunn’s number
- the question of where “things” enter into the equation... my answer is tied to the breaking of the illusion that we pay for things... any thing has the internal subjective values of the participants, including money (what £2 might be worth a millionaire or a starving bum)... i see them as resources brought in with invitation, and rewarded in the subjective enumeration process internally (eg I have a factory with lots of machinery, if anyone can

make use of it)

- approaching troubled financial organisations, eg sinking hotels or companies, and replacing traditional employment with the scalable invitation membrane
- reducing encumbancy of “joining” to a minimal, mainly through the doubling your money mechanism
- granularising the time and effort that it takes to release money flow for putting forward tenders, thus reducing the amount of money released... down to £10/hour
- opportunistic walk-ins is not only about giving a mind-shifting statement, but also gives money to the individual... if they wish to know more, they need to invite us in, and double our money
- the risk of the host is in money with the hope they produce value, and the risk for the invitee is their time may not be well spent
- two sources of income: people who are not invited and givers who are the invitees who spend the money they come with at whatever level of scale, and the xchange of value for money
- people work at different frequencies and periods, constructive interference is the production of value
- is money pooled? can we abstract it to an impersonal location, or is it market specifically between people? i am imagining a plate of glass and slapping the same amount ofmoney on either side, matching, leaving it there while they work inside, and when leaving, picking both up
- proposal is for a single day with pervasive play, seeing if it catches, or a longer period of say a month where the growth in terms of people increases gradually and naturally...
- map out user cases, see how the system can work... “follow the money”
- check out engines of growth, the lean business handbook, three equations, one is to do with viral...
- quanta of money, in terms of scale
- “if it fails, you leave with what you brought, plus personal experience value”
- “break even: you leave with what you were guaranteed, plus personal experience value” which is a dynamic equilibrium, a second order constancy
- “optimum: leave with what you were guaranteed and whateversplit of collective profit has been subjectively shared”
- fuzzy network, nebula
- the membrane is the boundary of the proposed hub structure
- the hub continues with its current practice or renting space-time, we are replacing the host-exchange system
- can someone be invited beyond or below the amount they are being invited...? i presume if they are sharing the value internally produced... it’s a bit like selling tickets to an event or conference... is there any way to jump into higher levels of scale...? pure gifts, i guess...
- the system tends to encourage collaboration, fair subjective evaluation, otherwise people are not invited to return... and eventually, money is given away, only to find it returning annoyingly... at the higher levels, money is willingly given, only to be equally returned... that is money is given away...

- process and equation for “income” boundary wrt value, in the forms of non-invited (1a 1b 1c), invited without matching (1a’ 1b’ 1c’), and invited (2a 2b 2c); doubling or matching £
- process and equation for internal subjective evaluation, in the form of subjective enumeration or weighted subjective value (3a 3b 3c) fractional personal subjective v=
- process and equation for “outgoing” boundary wrt value (4a 4b 4c), equal distribution and time fractioned, and distributed in the ratio of subjective enumeration

I have recorded most of the conversations (about six of the twelve hours chatting) and will be listening to them to pick up observations my mind missed or resisted at the time, and shall put up copies on the net in due time.

The Commons

It is important to recognise that everything within the entity is the commons. Although there may be individuals aligning to achieve local objectives, there is no exclusively privacy or certainly no intellectual property. As we shall see, the means by which money is distributed to members within the entity relies on the non-bounded nature of the internal space of the eco^2 entity.

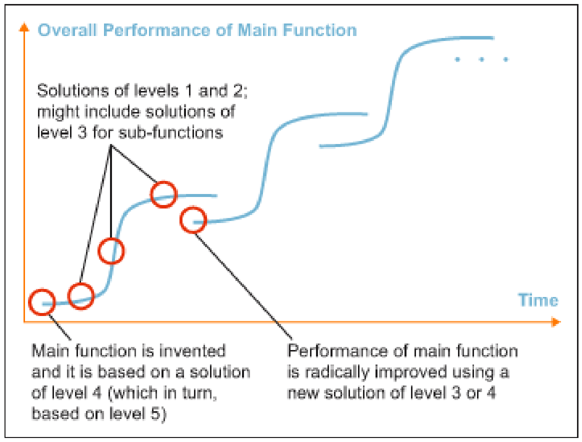
Nevertheless, it may be useful to share a collaborative copyright in relation to the social objects which currently exist external to the entity. That is, it may become necessary to exercise copyright control against the infringement by external private bodies, thus inviting lawyers and so on within the entity. However, this can only be considered an exceptional and rare move, since inviting this kind of dynamics within the entity is inviting the institutional forms of thinking to enter the entity. It is preferred that those within the entity exercise the flexibility of thought to constantly evolve new and unique solutions for given conditions, rather than fighting battles over past products.

projected moneyflow

This moneyflow google spreadsheet shows attempts at trying to model the boundary; basic Cascade shows the potential growth rates model.

It would be useful to have an iterative model, but a basic “flat” model might be easier to comprehend.

An interesting pattern to emerge from even the flat spreadsheet is the interlinking “s-curves”, which appears when people are playing with “bootstrapping”, or “emergent growth”, and so on.



In our case, the s-curves are the effect of the “quanta” of money-time as more players appear at the higher levels of scale.

traffic lights

Although the internal dynamics of the entity are self-organised, there are certain ways we can help ourselves navigate so that we can get best use of our time. Hence the simple use of traffic lights, using red, orange (or yellow) and green, to indicate our current state. This is used at different levels of scale, from the individual, to meetings, collective projects, action cycles, to the state of the whole entity.

A general rule of thumb is to recognise the traffic lights are not to indicate the internal state of the organism, but an outward declaration to others of their social openness. Red means closed, and it is not advised to engage for whatever reason. Green means open, and engagement is welcome. Orange or yellow means engage, but do not interfere or contribute unless asked.

individual badges

People indicate the state they are in using the traffic lights.

- green means one is open to engagement, open and clear, and free... an open invitation to be engaged, to be made use of... being of service
- red means one is closed to engagement... one is committed to thinking or acting in a way which is cut from others
- orange means one is committed but open to engagement if the time is right... this means that another may engage passively, and only if they are asked, should they contribute
- (yellow means one is more open... although committed generally, such individuals are open to approach)

meeting traffic lights

When people gather, and are forming some kind of decision space, the following colour is made available for others.

- red indicates the group is closed... this often indicates a decision meeting
- green means the group is open, everyone is actively invited to engage... this sometime indicates that there is a need for people to participate
- orange indicates the group is committed but it is still possible to observe, and only when invited, can a new person contribute

action cycle status

The action cycle uses traffic lights in three ways: generally, as the structure of the action cycle's hour, and within. Within the action cycle, players may use the cards to indicate votes etc. As the structure of the action cycle itself, the yellow and red cards are used to veto the group, and the green card is used to explain the conditions before the action cycle is agreed to initially. Their general use are indicated below:

- green indicates an action cycle is open to invitation
- yellow means someone is looking to create an action cycle, or needs help to create one
- red indicates an action cycle is underway, either in that hour or the subsequent hour
- (orange indicates an action cycle is underway but is more open)

project status

Various projects are underway at different periods of completion. It is important to emphasise the colours do not indicate the health of the project, or how far along it is in its process, but simply how open it is to others to contribute.

- green - project is looking for others to contribute actively
- red - project is closed and committed
- orange - project is committed but open, contributions possible but only on request
- yellow - (project is open, participation more welcomed)

Colours may be used to indicate health or how far along it is in terms of completion, but it is best to mark this with the colour status, which will generally phase through green, yellow, orange to red as it approaches the final conclusion.

entity status

A general status on the health of the entity in terms of how much invitation is possible.

- green indicates the entity is open to invite others to contribute to its membrane
- red indicates the membrane is closed, the entity has entered emergency measures, in the process of dissolution
- orange indicates the membrane is not so healthy, and requires active attraction to ensure its rate of growth continues
- (yellow indicates the membrane is quite healthy, invitations are open but some attention

is required to attract more players)

connected and continuous graphs

Depending on the set conditions, the entity could be seeded by anyone anywhere. It simply requires the methodology of invitation for it to make sense, for it to start. This will derive different entities, and the subsequent problem of how the surplus is distributed, or in terms of the individual, which entity to join.

To avoid these problems it is strongly suggested that members of the entity be graphed in terms of invitation so that the network can be mapped. A simple analysis should determine whether the entity is connected or disconnected. That is, whether an individual or a group is connected to all other members. To avoid problems, we can suggest a simple default position is that the entity is that which has a specific nominated individual as a member.

There is also a problem in terms of continuity. Just as in a rope there is no fibre which is continuous through the entire length of the rope, so there is no individual who is continuous through the life-time of the entity, certainly if it outlives human beings. This is not so strange, observe the number of companies or governments that have lasted longer than those who initiated them. Because of the fluidity of the entity, issues may arise that certain individuals may be invited who are harmful to the whole entity, and if they enter into a mutual invitational pattern, they may be allowed to persist to the detriment of the whole system. It may be wise to have a continuous thread, a select individual, which perpetuates the entity, who is invited by default.

It may appear that by making the entity relative to an individual, it appears to bias a centrality, but there is enough mechanism to keep the emphasis on the boundary and not on the centre. The selected individual is unlike normal players. Like the digit zero is not a normal digit, performing a different function than any other digit, since it represents nothing. The individual has no more powers than any other player, except that the entity is necessarily related to the individual. That is, disconnected groups may constitute entities of their own, but are definied relative to the entity which has this individual. Thus, if there is any desire to keep unity, it is relative to the entity that has this individual, by default. If this individual removes themselves, we enter into a space where multiple entities may exist. This may lead to various forms of confusion and competition, something which the design intention of the eco^2 is attempting to avoid.

Amusingly, if we are to derive unique identity numbers for members, such an individual may be marked by the digit or number zero.

user cases

Apart from the Action Cycles, here are a few hypothetical examples of how people manifest the eco^2 entity without taking the route of creating companies and traditional organisational

structures:

- some young men funding their love of parkour
- a management consultant developing a dynamic form of myers-briggs
- an artist is invited to put on a show
- a small company converts to eco^2

our parkour

A few adolescents have been practicing parkour in their local city. There are three of them. They see how things are going, how they have to compete on the global market against other parkour practitioners producing outrageous results, their moves recorded and viral on the net. They see the best getting picked up by Nike to head an international campaign, “Do what can’t be done!”. The prospect of deriving some kind of financial security, to pay for shoes, or the mats at the gym, is slim to non-existent. They know they will have to get proper jobs to pay for their hobby, just like the rock-climbers of the nineties, with only a few heading up their own climbing companies.

There seems to be a huge gulf between nothing, and then “professional”. Same could be said with the music industry or the sports industry, but those “industries” are established. And in fact, those artists end up selling out.

Parkour is different. No special equipment. Just the space around you. Man in his urban jungle. A state of mind. To overcome the walls, bend the laws of gravity to force and will and agility. To defeat the machinery. It was never about making money.

So, one of these three young men invited. The group are invited in for an hour to demonstrate their skills in a central location. The following week, there is an event at the same location, an opening at a gallery, and they are asked to show their skills as part of the evening’s entertainment. A week later, they are invited to be recorded in some documentary.

At each stage, they are invited, they are guaranteed income. Simple.

As a bonus, they mingle with all kinds of different people, and start thinking of ways to combine their love of parkour with some urban regeneration community activists, local government, and health workers tackling drug use. Because the manner of involvement is warm, and non-organisational, the form of collaboration is between people, not organisation. They bypass all the effortful work of learning how to navigate the bureaucracy of organisations, and introduce change that is scalable, from the ground up. So, they have a club, health officials take part, and it is evidenced to government members, at a scale that is manageable, growing from five kids to thirty over a year.

dynamic personality

Myers-Briggs is proprietorial psychometric method based on the ground-breaking work of Jung. It costs £3000 for a week's course to become qualified to conduct it at professional level. There are companies who safeguard their intellectual property, and thus the bar is kept at a certain height. It is this qualification that executives pay for when they hire professionals to conduct psychometric tests of their personnel. This is the current playing field.

Let us examine this a little more closely. It is hoped that the results of hiring such professionals lead to an increase in work effort, a greater efficiency in employee interaction, a streamlining of process by which the company, at the end of the process, makes more money. "It is hoped..." Just in the same way sticking a picture on the opposite side of an article in a magazine eventually leads to more products being sold.

Simon has experienced the Myers-Briggs system over the years, and realises there are limitations to it. Specifically, he believes that it is too static, and that people demonstrate dynamic profiles. Simon has been to a few tuttles, and Philip likes the idea enough to invite Simon in for the day to see if he can systematise it with a few friends, a programmer, a mathematician, and a young marketing man who is at least conceptually familiar with the theory of Myers-Briggs. Philip spends £400 for the day. Things go well, they produce a prototype theory and practice and even a mockup on a computer, the whole experience clarifying what Simon has been thinking for years.

A week later, Simon is asked to see if he could run through a session with some employees at the Sole Shoe company through a warm contact the young marketing has generated. Simon is invited back for another day (another £100), the workshop is conducted -- for free of course -- and the results are monitored, in terms of personal subjective evaluation, and later by the manager. The prototype seems to be working. The dynamic dimensional model seems to be working. People are happier with their profiles because it does not fix them in a category, and shows how they fluctate depending on their circumstance and especially who they are with. And the computer geeks are invited to further improve the computer model and user interface and a new service is born. They start to attract some coverage, mostly through connections within the eco^2 entity, which shows off their innovation in dynamic psychometric testing. Their next company offers them money.

Because Simon is happy with the way he has been treated, admitting that he could not have done it alone, and in fact revealing that he was not aware of how much experience he had accumulated. The speed at which he has entered into trust relationships, and gone from protype service, to a serviceable product, is beyond his ability to understand. And yet, it has happened. And rather than taking this product and attempting to go it alone, finding clients etc, he decides to take further part in the eco^2 method. When anyone finds a client, they invite the others to be part. The money is less than what he was used to getting, since Simon and his team are not being paid directly for the work they offer companies. The profits are split and shared by everyone. There is security in this, since he realises pretty soon that everyone in the entity is effectively producing value which generates solutions which generates money flow.

He doesn't quite understand it, but the community he feels, the openness, is something fresh to him. And he can't help but start to apply his model and thinking and experience to helping others within the entity. Within a month, his regular invitations are increased to a seasonal invitation to help in the formation of teams which is leading to accelerated alignment and prototype formation -- what he used to call start-ups. His value is well appreciated by his colleagues, and when projects meet with fruition, and money flow is tapped from external organisations, he is proud of the part he has played. Soon, he is invited for a year, and at this stage his relationship to money has slackened. It is less of a pressure. And he is still living at much the same rate he was before.

The potential for a book, a dedicated website, training courses arise. But he does not return to the lure of money and the traditional methodology of company formation. He is happy with who he meets. He is happy with being of help and use to people who really value his contribution. He is less interested in the money, even though it has more substantial than it was. He is excited by the prospect of what lies ahead.

Reading the biography of the late Steve Jobs, he realises this is what he had experienced when he was younger, but had somehow taken a different route. The fixation with money, the security of a salary, the tendency to reproduce the same results. It was obvious, when he thought about it. His version of Jung's dimensions of self were dynamic, after all, not static. He had been static for too long. It took others to see the value in his experience. And for this, he was profoundly grateful.

putting on a show

How would people in this entity put up a show for a night? Let's say Wembley, or somewhere pretty large. The numbers I am suggesting below could be anything.

The traditional practice is for a whole set of managers and funders to be involved, paying the front of house for that night, those setting up the event, publicists managers of various kinds, etc. The money will be used to pay for what services individuals have provided. They may be permanently employed by a company or affiliated to some agency to be brought in for a temporary contract. If the whole thing cost around £20,000, this is made back by the ticket sales, thus in effect paying for the staff and producing a profit (say £10k) for those who invested the money in the first place. Everyone gets a paid, but in such a way that even the artist is ancillary to the production of money.

With the eco^2 entity, the movement of money is more fluid, and so is the alignment of people. There is no illusion about the movement of money. The artist is invited to play, and perhaps for £100k so that in a year's time their money is doubled to £200k, and meanwhile they may want to offer their services and create value at other events. All the players are invited, and let us say that in this case, the venue costs £10k traditionally. This means that the person who owns the

venue is invited into the entity for £10k, and again they may wish to offer their venue at other events over the season. Perhaps three people are invited for a week each to set up the event at different periods before the day itself (3x£1000), when twenty people are invited for the day (20x£100), and another hundred are invited for four hours to deal with front of house for five hours (100x5x£10). All the money guaranteed, and everyone knows they leave with double the money they entered with. Everything from there-on in is surplus.

When people turn up, tickets are sold, the largest movement of money occurs, the £30k from the pockets of the punters to each and every individual who participated, and if the eco^2 is working ethically, everyone within the entity at the time.

explorative ecological consequences

There are consequences to this entity. Depending on how fast it grows. It is hard to say. At this stage, in a document, before it picks up any significant mindmass, it may appear confusing, or conceptually beyond capacity. Nevertheless, when it is functioning, it does not matter how it works, for most people, the fact that it does is evidence enough.

There are certain thoughts that have occurred to me regarding certain future potentials. The ecology in which this entity exists. I have set out a few at the beginning of this document, perhaps the most important being that this entity might “eat money”. A simple observation, that if this entity grows exponentially, and as more people leave their money at the door, and this grows vertically with people leaving millions at the door, there may come a time when there is more money fixed in the membrane than there is free in all the economy of the world. A bizarre possibility, for sure, tricky to believe it might happen. Science fiction, perhaps. But if true, what happens beyond that point? Will money no longer be a functional social process?

I don’t know. I hope we have time to consider it as the entity grows. There will be plenty of speculation. There are other questions I have had in the process of collecting together the thoughts on this proposal, most of them dealing with possible social repercussions, potential “political” events which may occur, both in relation to the outside world of current social objects, legal, economic and political, and within the entity itself. These contemplations are not within the remit of this document, which is effectively an open document to prepare the ground for a proposal. As far as I am concerned, this entity is inevitable now. What we need to do, for those who are interested, is to consider the implications so that we can best guide it for the betterment of humanity.

Hence, if we are to continue with the biological metaphor we have made use of so far, we have the cell-membrane that is scalable invitation, the vacuole that is the non-directed gathering, the boundary interaction with hierarchical social objects like companies that is the action cycle, and the self-selecting filtering process by which people engage. What of the nucleus and its incredible bundle of DNA? Must we understand it in terms of the “selfish” gene? And the

mitochondria? The energy source of the cell? And will this entity evolve into different specialised entities?

I don't know how far the metaphor may compare, because ultimately, the psycho-social field of which our psyches and our social objects are composed and within which we exist, is quite different from physical systems. The substrate material is different. We are dealing with subtleties of awareness, and the enigma of consciousness. So, I humbly suggest another document wherein we may consider implications of this entity, where we may reflect upon our behaviour so as to best guide this entity, as a manifestation of ourselves. I do not know what part of the cell this may be comparable to. Because this entity is a non-group, and when we describe it and draw pictures of it, we tend to use bounds and wrap it up in nouns ("entity") and third person pronouns ("it"), there is a tendency for us, at least as english speakers, to reify the social process. To honour its unbounded quality, I am openly invite those who might be interested to explore these socially ecological concerns in wise^0.

glossary

guarantor - someone who invests/invites others, and only gets return based on profits by the collective
player - someone who has been invited, and guarantee the payment of someone else

gifter - person who puts up their money for it to be used, and expects no return; even a gifter will be rewarded with the guarantee if they are invited, and a share of the surplus
player - a generic term for someone who is using the system
guarantor - a player who wants to seed the entity, like a gifter but at the meta level, who is willing to risk not getting anything back ever; they have not been invited and thus can not win a guarantee; their funds artificially increase the size of the entity
surplus - the revenue generated when internal value translates into money... this is split equally between players, divided by time (and possibly weighted by ***subjective enumeration***).

Anna, Wendy's daughter, has asked what the members are called. An interesting question. I have been using various terms, but have realised how the terms are determined by subsequent social events, so initial roles can not be made. The generic term I have used has been player. In response to Anna's inquiry, my mind came back with re-member, eco-member, pre-member.

lloyd's consideration

Caveat: It's a long time since I did any serious mathematical modelling or system simulation. However, I do find it a useful way to interact with a newly proposed system because it helps flush out some of the things that otherwise are hand-waved away until it's too late. My intention is not to discourage or to prove either that the system will or won't work, rather I would like to move forward on knowing what it is that we do know and what we don't, as well as what we're going to ignore for now. I'm also aware that what follows is based on a relatively short conversation with david and may show up as much of my misunderstanding of what he said as weaknesses in my mathematics or modelling skills.

So

Assumptions (I've made these up to make things simple *for me to think* - they are certainly not set in stone)

- People know (or at least can express an intention) at the beginning of any activity, how long the activity should last.
- All money goes into (and comes out of) one big pot.
- All activities happen on weekdays.
- Money for hourly activities is paid in the beginning of each hour and out at the end of the hour.
- Hourly activities run 9am-5pm (ie there are 8 slots per day)
- Daily activities start at 9am and 5pm - money is paid into the pot at 9am and out at 5pm
- Weekly activities are 5 daily sessions - money is paid into the pot at 9am on the first day and comes out at 5pm on the fifth
- A season is three months of activity (13 weeks) - money is paid into the pot at 9am on the first day and comes out at 5pm on the 91st day thereafter
- An annual activity is one year - money is paid into the pot at 9am on the first day and comes out at 5pm on the evening before the anniversary.
- On any particular day or in any hour there may be no activities beginning.

Let MP[day, hour] be the total value of money in the Massive Pot and that this starts with £30,000

Let X1[day, hour] be the number of people who begin a £10/hour activity each hour of each day.
Let X2[day] be the number of people who begin a £100/day activity each day
Let X3[day] be the number of people who begin a £1,000/week activity each day

Let X4[day] be the number of people who begin a £10,000/season activity each day
Let X5[day] be the number of people who begin a £100,000/year activity each day

Now I can't see this immediately in the document, but my understanding was that if the activity "fails" (whatever that means) then the participants walk away with their original stake, but if it succeeds then each participant will walk away with double their money.

Assuming that the probability of success is static for each activity, and that each probability is independent of all others,

Let P1 be the estimated probability that an hourly activity succeeds
Let P2 be the estimated probability that a daily activity succeeds
Let P3 be the estimated probability that a weekly activity succeeds
Let P4 be the estimated probability that a seasonal activity succeeds
Let P5 be the estimated probability that an annual activity succeeds

Then the income to the pot from hourly activities in any given day is

SUM(X1[day, 1..8])*10

and the estimated payout from the pot from such activities is

SUM(X1[day, 1..8]*P1)*20 + SUM(X1[day, 1..8]*(1-P1))*10

And then the income to the pot from daily activities at the start of each day is

X2[day]*100

and the estimated payout from the pot at the end of the day is

(X2[day]*P2*200)+(X2[day]*(1-P2)*100)

The income from weekly activities at the start of each day is

X3[day]*1000

and the estimated payout from the pot at the end of each day is

(X3[day-5]*P3*2000)+(X3[day-5]*(1-P3)*1000)

and similarly for seasonal and annual activities.

What's not clear to me at the moment is what happens to surplus, ie financial value created by

an activity (eg book sales, consulting fees, etc) and whether that goes through the pot. It might be worth leaving this out to start with - ie assume that there is no surplus for simplicity's sake. I assume that the transparently reported generation of surpluses will be an incentive for increased participation.

If I were a younger man, I would pull together the whole equation to show what the estimated content of the pot was at the beginning and end of each day, but I'm tired and I need to go to bed.

I will instead leave the following questions, invite others to add their own and see what my brain does with this overnight:

If you seed the initial pot with £30,000 what is the shortest time in which it could be completely depleted?
How do we envisage the distributions of X1..X5? ie if we were to model this, how would we decide on likely figures for each day?
Can we assume that success will breed success - ie are P1..P5 actually interdependent and all tend toward 1?

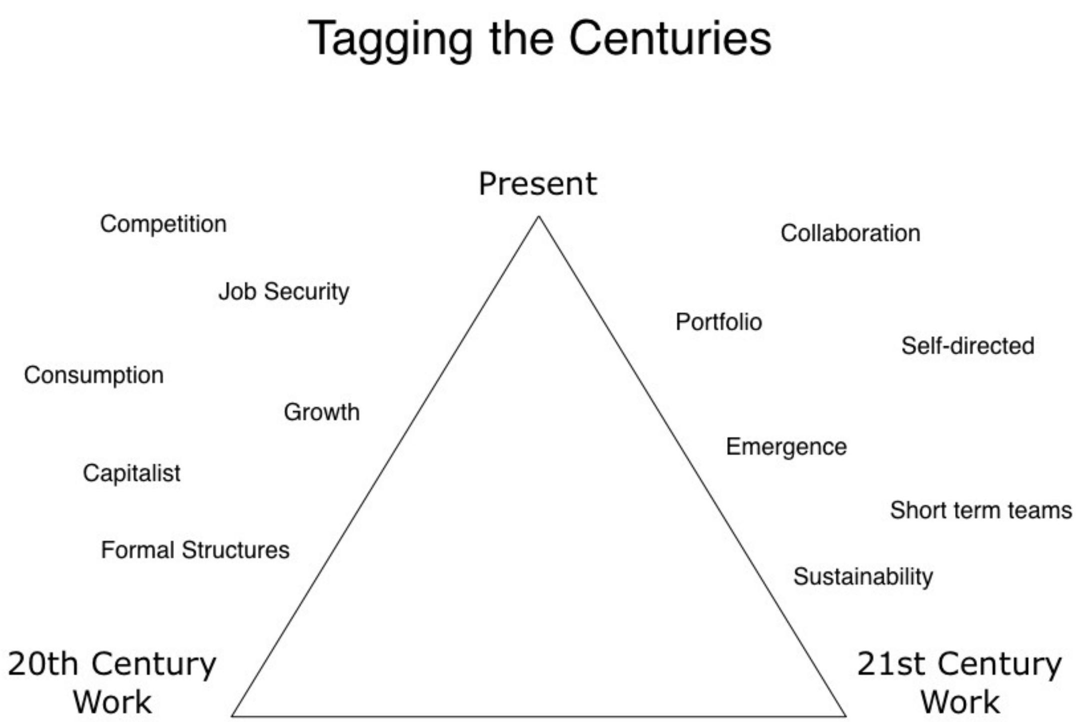
pam’s meta-tools

Pam has sent things through email. She warns that it is not for wide-spread public attention, so I think we are safe.

The diagram are early versions - so please don't share "as is" unless you make that point.

I have done scribbles over them since - but not modified the digital versions yet.

Tagging the centuries / **Tagging our changing.times**



That "Tagging the centuries" title is no good for people who are young and who see the 20th century as "history beyond their adult experience". Best therefor to rename it "Tagging our changing.times' - not so catchy but more inclusive.

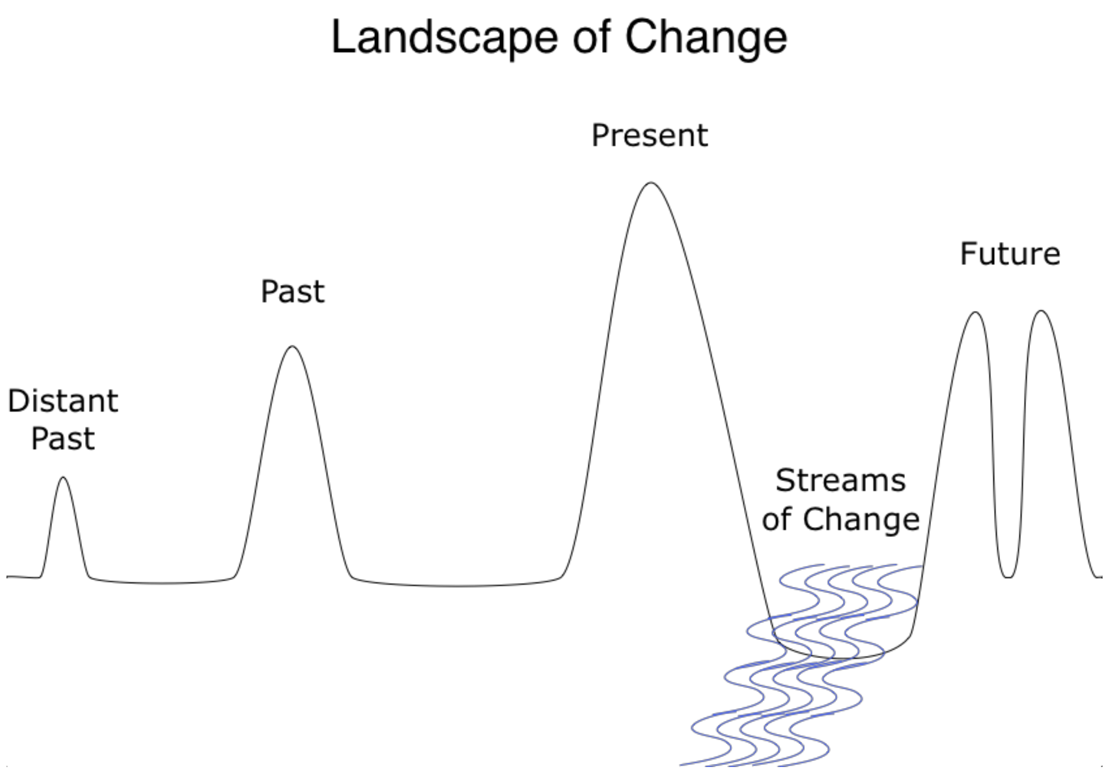
Changes - I now put a little stick man on top of the triangle. I label the base of the triangle "Now" label LHS "Past" and RHS "Future". The key words I use to seed the diagram vary

according to the user(s) and my purpose.

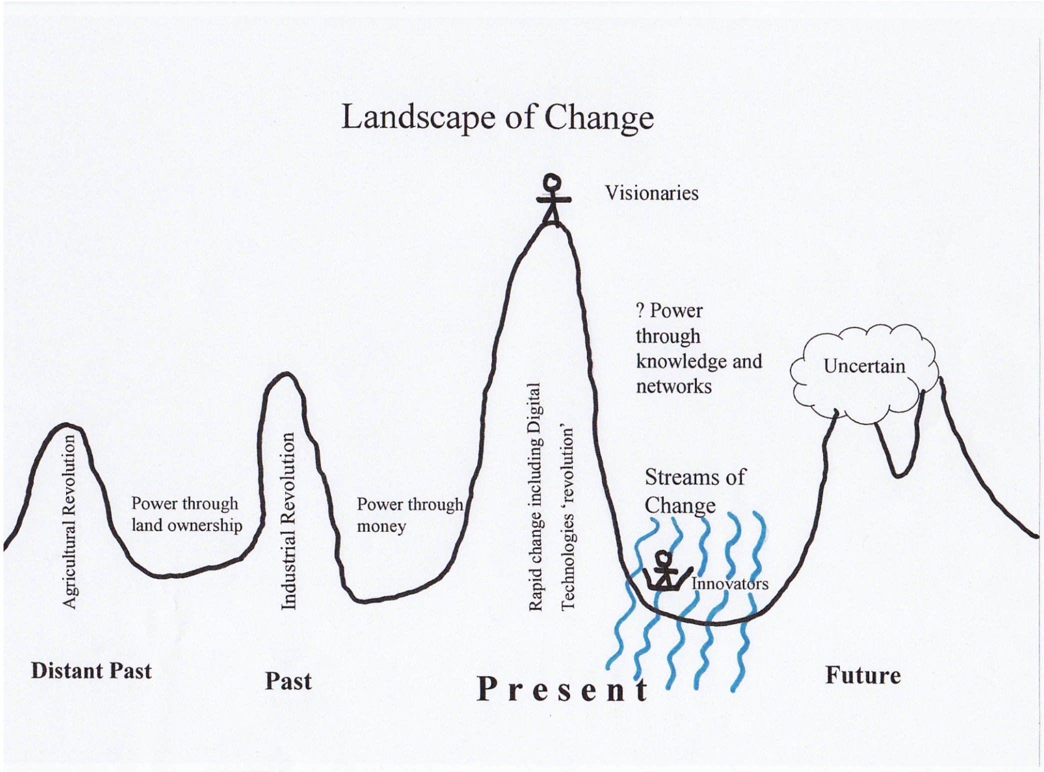
This diagram gives an introduction to the idea of "standing here" i.e. in the present - as if on a hill top - and from that vantage point looking back into the past and forward into an unclear future.

The tags are a quick way to note ideas of things people are aware of connected with how things are changing. Some people find it easier to start with how things are now (filling in the triangle) before taking the longer view of a process of change. Having thought about the somewhat turbulent present, they can then think about the past and how it was different. Having seen that process of change from past to present they can more easily look forward and see if they really believe things will return to what they knew in the past or if there are likely to be differences.

Past, present future /landscape of change

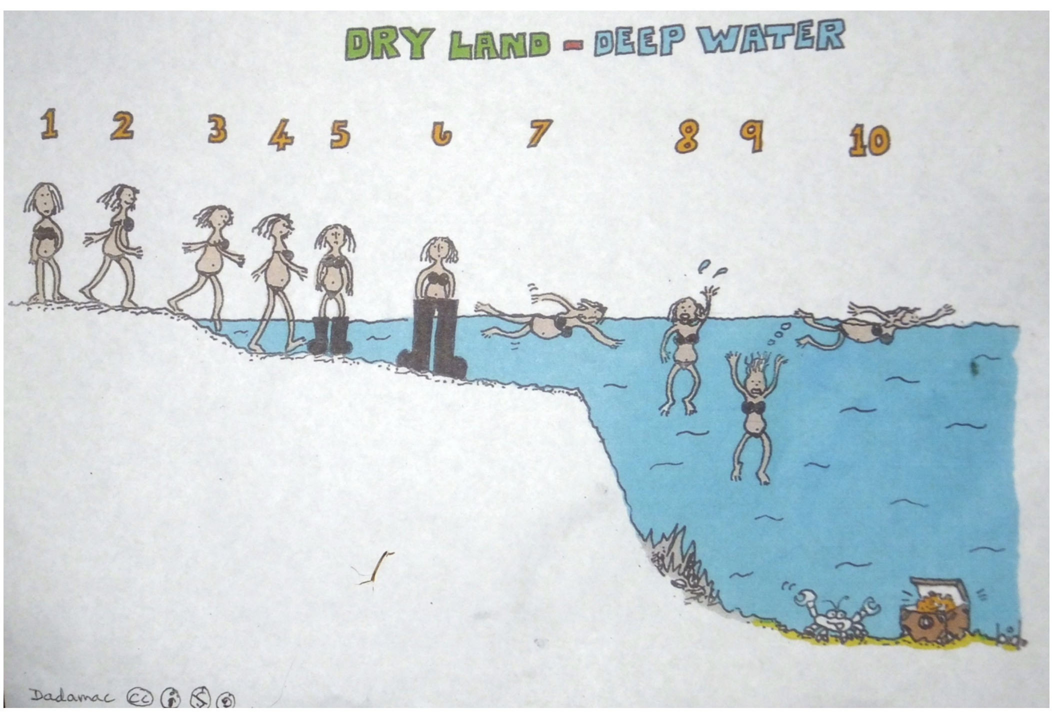


This diagram is easier for people to understand if they have done the tagging triangle first. You are right that it would be much better as a landscape that people could fly over.



I'm sending you the original and a played-around-with version that tries to explain it more (Andy has just showed me how to use my scanner).

Dry land and deep water



as mentioned in previous email but not attached

There are other diagrams for activities that are specially related to workshops for people facing redundancy etc - but they are mostly still scribbles in my notebooks - ready for me to do on flip charts.

pam’s first major written explanation of eco^2

First attempt to explain - especially with ref to "It sounds like pyramid selling" and building on your comments about it being like the commons - which relates to P2P ways of doing things.

~~~~~~~~~~~~
ref "so, this is a pyramid scheme as they say" - no it isn't (though I understand that confusion. I thought so at first.)

I have spent big chunks of time with David trying to get my head around his idea, and now I think it is a good one. It is possible that my attempt to explain may leave you even more confused than you are now. It is one of those things that will only make sense easily once it is possible to see it working.

Think of it more as a way of behaving. I don't know what David would think of this explanation, but it is my interpretation and it may help. Some of the details may not be completely accurate.

You know how we have to behave in different ways at different times with different people - for instance when we are with people who "get it" regarding P2P, the commons etc we can behave and use words in a way that are not appropriate with people who are still in a traditional competitive mindset.

I touched on some of this in "The Invisible Revolution:
http://www.appropedia.org/User:Dougald/NPT1PamelaMcLean, published in
Despatches from the Invisible Revolution
http://pediapress.com/books/show/07ebb0bdddb0412af5bfc25bc35d2a/

In a way David's eco^2 idea helps us to behave (for a while) as if everybody believed in P2P stuff and the commons. When you are "in eco^2" mode then it is as if the commons was the norm. The question is - how do you get into that situation. Well with eco^2 you get invited in , because the person inviting you believes that you will contribute to creating something of value. To break away from the usual idea of "being paid for what you have done" you are simply invited to come in and see how you can contribute during the time you are "in eco^2".

Imagine that David started off with £10.000 - say from some start up fund or something - he
~~~~~~~~~~~~

could then start to behave the eco^2 way. He would be an initiator (I don't know what his word would be for that). Now he is going to use the £10,000 to create some kind of value. He would invite people who he thought would be "valuable" (useful in creating new ideas, solutions, etc). If he invites them for an hour then they must bring £10 with them. If they stay for the hour then they will get £20 when they leave.

If they seemed valuable while they were "in eco^2" then they will get invited back - probably for longer. (Say its' £100 for a day and they can't afford to accept such an expensive invitation then they could accept for one hour and then pay again at the end of the one hour etc) If they know they are going to be there for a day then they may invite other people (each person who is invited is using up some of David's £10,000) - but something of value is being created.

It is a slightly different approach to the way that money is normally used to enable people to do useful creative things together. I've role played it a bit with David - with real money - but only for very short periods of time as our money is limited. Actually putting the money down in that way alters the relationships and accelerates the thinking. When it really gets going then I think it would look a bit like an open cafe - but instead of people just talking about things they would actually be working out ways to implement them. Some people would be there for a season, some only briefly. Once it gets started, then as long as there are enough long term players there is enough liquidity to double people's money when they come out. Then it keeps running a bit like a bank does (with money flowing through it) except that unlike a bank it is producing valuable ideas etc. Some external entities will give money back in response to the value that has been generated. That can also be used to help with the "doubling of the money".

I'm not sure David will completely agree with my explanation. But I hope it has helped a bit. It is not a a pyramid scheme.

The launch party is to help him find people who will help him to explain more clearly so he can get the start up money. However - cathc 22 - until he can explain it more clearly its hard for him to get the people who will help him to explain!

pam’s second

Still thinking about the money and the big emphasis on "double your money"

I think it's a mistake to put the initial focus on the money. The really important part is about value creation. It is about the way things work amongst the people creating value together while they are together in eco^2 - i.e. in the space that seems to work like the commons.

I see it more as cultural shift - so that doing something together in eco^2 is almost like a temporary time travel trip. It would take a long time to explore this idea properly by email. - it's an idea that I am only gradually seeing. We would probably need to create some diagrams as we

went along.

You put your money down before you enter eco^2. (A bit like paying your fare before the time travel machine takes off!) This is your commitment for how long you intend to be there. It is also a kind of reminder to you that you are leaving behind the usual mechanisms for earning money/being paid for what you do.

However, you don't have to worry about the opportunity cost of having come into eco^2, (i.e. the fact that while you are in eco^2 you are not earning anything, but your bills are still piling up back in the traditional material world, and you need to pay your fare home etc). That is taken care of because you know that when you leave eco^2 your money will have doubled. (Obviously the extent to which this doubling is really enough to cover your needs will depend on how extravagant or modest your lifestyle is - but at preset it's £100 a day which I know would seem good to me - although peanuts to some). This "doubling of your money" should not be confused with the normal "payment for work done". Putting the money down as you come in makes it clear that you are entering eco^2 and it says how long you expect to be there.

The time when you put your money down as you enter is also the time when you explain how you have come to be there - who has invited you.

I think if no-one has invited you then you can come in - and you have to put the money down as you enter depending on how long you plan to stay - but I don't think you get it back again afterwards. I need to check that.

Once eco^2 gets to a certain critical mass, with enough short term and long term players then interesting things start to happen to the cash flow - and the "doubling of money" gets easy - remember this "doubling of money is only at the rate or £10 becoming £20 after an hour , or £100 becoming £200 after a day. You wouldn't be surprised if people who were doing useful things created value worth £10 an hour would you ? It just that the mechanism of doing something for an hour and then having £10 more that when you started is very unconventional - because David is trying to alter the tight one-to-one matching in our thinking ref "I do this work and then I am paid for it." No! You are invited into this place where value is being created and you see what is going on and see if you think you can help in any way - and because you were there while stuff was going on , learning, discovering what needs doing, you will go out with some money - as agreed when you came in - not dependent on what work you did there. (Of course if you don't find ways to be useful after a while .. even if its just a bit of tidying up or making the tea - then people won't want to keep inviting you.)

Also, regarding income streams, when there is evidence of value created and problems solved etc, so it becomes increasingly likely that beneficiaries of some of the solutions may donate to eco^2 to enable it to continue (this compares with the "traditional way" of paying for work that has been done - so people do have budgets for this kind of thing). However when an organsation "pays something into eco^2" because of what eco^2 has produced for their benefit.

It is a mixture of a "thank you" and "hey - please keep up the good work, we like teh kind fo things you are doing and - who knows - it might be useful ot us again sometime.

Obviously nothing is guaranteed for ever - in some way the cashflow is the same as traditional banks - they can keep going because they keep going - and some people have agreed to leave their money there for a long time.(NB Big difference - non-one ever just gives their money to a bank without expecting to get it back - however that does happen in eco^2)

pam’s third

Final attempt to tie it in with the familiar, so that minds are free to focus on what really matters about the fact of being in eco^2 and that it will be a great way to create value ~~~~~~.

We all know that we need to find ways to earn money, and would like there to be overlap between the things we are passionate about and our "day jobs" - the good ideas we have - the creative solutions we want to bring to various problems, the desire to use our skills in valuable ways etc.. However for many of us who are accustomed to doing the things we care about for their own sake rather than to get paid for them the idea of "double your money" as the main motivator is unattractive and the mechanism is deeply suspect. However, we are all okay with the idea that people do stuff and money is exchanged in the process, and people who do the stuff come out with some financial benefit.

There are other ideas we are okay with:

People who are providing hard-to-quantify "information-value" - i.e. creating knowledge, curating it, sharing it, etc etc ... are doing something of value. They are often doing so outside the normal payment mechanisms. Such people are the true "knowledge workers" and the face of future "collaboration-instead-of-competition". (There are many misunderstandings about "information workers" and the"information revolution" - it is much more than moving call centres to India and outsourcing data entry tasks)

I explore some of those ideas in The Invisible Revolution:
People have talked for decades about the impact of computers and an 'information revolution'. Often what they mean is doing what was done before, but handling the related information in a slightly different way. People who collect facts and figures now collect many more facts and figures. Companies who need people to give information to customers move their customer information services away from behind local counters to call-centres thousands of miles away. Such examples are all around us.
However, introducing the technology does not immediately translate into systemic change. Established organisations add computers and the internet to the way they achieve their

objectives without any deep institutional change or altered mindset. Top-down organisations have websites and may be 'two-way' in their use of the Internet (sending out online questionnaires, using Twitter and Facebook, and inviting 'bottom-up' feedback through various channels) while still maintaining the same traditional structures, with the perceptions of 'top' and 'bottom' unchanged.
The Invisible Revolution involves a more dramatic change.

We need some dramatically different approaches to unlock the "new value" . Many people are happy to contribute to this communal wealth but they/we do need a mechanism to engage with the material world. Traditional payment mechanisms don't fit comfortably - and yet the bills must be paid. This is new territory, David's approach is a radically new way of moving money to people who are contributing value in this new world.

David is doing several things with his doubling your money approach. He is making a point that "you have been invited in because you are considered valuable" - but you are not "coming to work" in the usual sense. Everyone's time is considered equally valuable. You" put your money down" as you come in - illustrating how committed you are to spending time in eco^2 (and how long you have been invited for). everyone puts the same amount down for the same amount of time - no arguing about who is more valuable. If people make themselves useful they get invited back and if not then they don't. Making the tea and helping things run smoothly can be as important as doing high profile stuff.

He is also very interested in the idea that , in traditional manufacturing, when we have bought things we weren't exactly paying for the things we bought to be produced. (because those thing had already been produced - if we did not buy them they would still be there - even if someone lost money as a result of the failure to sell). The money we gave in payment was to enable the next things to be made... so we were always buying forward (of course this idea of producing first and selling afterwards is changing now - print on demand books are an example).

With David's approach he is emphasising this moving forward idea. Eco^2 produces value and attracts outside money to enable it to continue producing value. For example, a company or angel or philanthropist who wants to help value to be created may decide to be part of eco^2 for a season. They would need to put in £10,000 to be part of it for a season. They are not expecting to double their money (but are just giving it to eco^2 so they can be "part of it" and have the freedom to make suggestions, ask questions, see what is going on, and generally join is as much as they like) they don't actually have to attend for all the hours of the season, but they are welcome to come in as much as they want to during that time. This idea of "paying forward" all the time is important. The money exchange is not "in return for work done" (as in traditional wage slavery, self-employment, consultancy etc) it is "to enable more value to be created - whatever that value may turn out to be". A bit like academia when focussed on pure research and quest for knowledge - rather than immediate pre-determined value type research for big companies. You could think of eco^2 as a bit like a very creative acedemia/ideas-and-solutions-generator - but with money always going in for what will be done -

not as reward for what has been done.

It is much more fluid and less heirarchical - more like the commons. It is a somewhat futuristic exploration of the reality of the true "information revolution". It is changing the relationship between money and the creation of value.

juke's musings

Juke provided this by email:

> Thinking in terms of the existence of mathematical models as representations of larger structures assumes certain regularities or a compressibility or in a human comunicatable sense the applicability of a compression in terms of its description and the computational effort required to obtain it.
>
> My feeling is that many natural systems which may have nonlinear network properties requires one to ask questions along these line when thinking about the existence of explanation. I also think there is a distinction between (meaningful and useful), (lossy and non lossy, the question of what is lost or ignored) descriptors of systems and i feel this is often the case in ecology and economics.
>
> A Short Introduction to Model Selection, Kolmogorov Complexity and Minimum Description Length

juke 2012 0115

> I have some interest in attempting to understand financial transactions as a form of flow of potential energy and or information and maybe even relating it to thermodynamics and ecosystems. Does this relate at all?

juke 2012 0117

> Your pictures made me think about Autopoiesis, their is a mathematical description of Autopoiesis that may help and I will see if I can find it. One important part is the idea of destruction and recreation as a descriptor for life in a boundary. The main people are Humberto Maturana and Francisco Valeria they were biologists but reached into economics, company structure, management theory, self and spirituality.
>
> http://en.wikipedia.org/wiki/Autopoiesis
>
> You could switch money to a time based investment of a time bank (with some small print that possibly at a later stage money and time could be related to each other). Time investment, or a time bank associates with the idea of community, volunteering, social good, while money invested has the association of bankers, credit cards, get rich quick schemes and...

juke 2012 0120

sal’s expertise

Sal had this to say about it:

> In computer programming, the adapter pattern (often referred to as the wrapper pattern or simply a wrapper) is a design pattern that translates one interface for a class into a compatible interface. An adapter allows classes to work together that normally could not because of incompatible interfaces, by providing its interface to clients while using the original interface. The adapter translates calls to its interface into calls to the original interface, and the amount of code necessary to do this is typically small. The adapter is also responsible for transforming data into appropriate forms. For instance, if multiple boolean values are stored as a single integer (i.e. flags) but your client requires a 'true'/'false', the adapter would be responsible for extracting the appropriate values from the integer value. Another example is transforming the format of dates (e.g. YYYYMMDD to MM/DD/YYYY or DD/MM/YYYY).
>
> Another example - two systems, UK electrical infrastructure, and North American laptop. They both have their internal systems, but can't co-exist and work together without an adaptor. The adaptor translates the physical plug and the electrical signal so they can work together. Electricity passes from one system, into the other, where it creates value, and then leaves again.
>
> With your idea, one system is current capitalism, the other is the non-money system within the self-selecting selecting network. We want people to be able to pass from one to the other, and back. I think to make this clearer, you need to define how the internal system works explicitly. Then, the idea of the membrane can be described as an adaptor. At that point, the maths become clearer, as you should be able to describe all possible scenarios using your positive only maths, or standard accounting principle - the adaptor will translate.

sal 2012 0118

otherwise

Rather than produce one committee version, anyone is invited to add their own description and observations in the form of pictures of words, with an additional call for mathematical modelling. The people listed below have been involved in an explorative invitation of the entity conducted on Tuesday 17th January at Westeminster Hub.

- david's intuition
- nick's version
- tony's meanderings
- lloyd's consideration
- jogesh's surmise
- janet's observation
- sal's suggestion
- paul's musing
- alberto's discussion

It is hoped that as the proposal coalesces, the following people are invited to contribute:

- Pam, specifically with respect to the self-selecting filter
- Tav, specifically with an algorithm for the internal tracking of subjective enumeration
- Juke, specifically with mathematical models of external money-transitions
    - heavy mention of autopeosis
- Jonathan, because he is a polymath
    - eskrows, money fixed to guarantee payment
    - war bonds, relationship of guarantee and time
- Nathan, because he has a brain the size of antarctica
- Doug, because, well he is a minimalist and his network might be cool
- Harry, because he is into simplicity
- Bonnie, for her recent appreciation of female funding drive
- Colin, for his experience in the enterprise field and social capital

Requests shall be submitted to the following networks:

- The Next Edge, on facebook
- 21st Century

additional documents

This document is an open process document. This means it reflects the continued growth and development of the idea within David Pinto, Lloyd's, and other people's minds. Although only David and Lloyd have contributed anything written, it has had effect on other's minds sufficient to produce extended and protracted discussion, spoken and written. Three other documents have arisen as a result, one of which contemplates the ecological consequences socially, and the other two are tighter delineations for a proposal and a call for maths solutions.

Wise^0 outlines considerations that seem outwith that of this paper. It concerns the consequence of the entity within the current economic climate. That is, it is not to do with how it might or can work, mechanically, as it is described here. It is more concerned with the consequences should it work. And primarily, it is concerned with being sufficiently aware of potential problems in order to avoid them arising in the first place. Most problems, hopefully, are avoided by the initial design of the entity, the scalable invitation and tracking subjective evaluation, for example. But there are others in terms of how the entity could be abused or misused, as people perhaps import notions of competition and organisational thinking such as roles and positions, or motivations to make money to justify their time there. The entity will also necessarily attract attention from legal bodies, on how best to tax the economic transactions, even if everything that is being done is based on gift-giving. Or even, should it come to this, that the entity be illegal in some way, even though it may be providing solutions beyond the current economic objects out there. Such high-level, or deep-level, considerations, are followed in wise^0, and as with all eco^2, it is open to everyone to contribute.

More pressing, is a tighter document which outlines the proposal. The entity consists of a complex, a system of parts. It is very easy to get lost to the relative importances of these parts. It is important, then, to highlight a way of explaining and highlighting those parts that are functionally useful to a particular readership. Namely, those people who are in a position to act on what they read and provide space, people, and or money. Given the importance of the mathematical basis of the boundary of the entity, the proposal may simply be sufficient to fund an exploration of the maths equation. It may be to fund an experiment to test some practices. Or indeed, to birth the entity once and for all. Hence, the proposal^1 is a definitive proposal for the birthing of the entity, with clear steps for participants.

A third document outlines the mathematical challenges to capture the various processural parts of the entity in mathematical script, or as a mathematical machine or experiment. The purpose of that document is to delineate as clearly as possible the necessary elements which are to be modelled. The mathematical form, or the coded mathematical experiment, will not only inform the design of the three substantial elements of the entity and how the three equations will couple, but also offer a suggestion for the initial birthing parameters as well as guiding numerical objectives for healthy sustainable growth in practice. That is, how much invested, how many

people, over how much time. A mathematical description will anchor the entity in a language that is universally accepted, and avoids the pitfalls of purely conceptual contemplation, and the myriad of disorders that accompany discussion, such as judgements, misapplied critical thinking, and so on. In addition, the math^3 document acts as a challenge paper for mathematicians and computer scientists to enjoy. A prize for delineating the maths may be offered should the problem prove overly troubling.